

# FACULTAD DE EDUCACIÓN DE PALENCIA UNIVERSIDAD DE VALLADOLID

# TEACHING A FOREIGN LANGUAGE WITH BOARD GAMES AS A RESOURCE

ENSEÑANZA DE UNA LENGUA EXTRANJERA CON LOS JUEGOS DE MESA COMO RECURSO

> TRABAJO FIN DE GRADO EN EDUCACIÓN PRIMARIA

AUTOR: Alexander Martínez García

**TUTORA:** Tamara Pérez Fernández

Palencia, 11 de julio de 2024



# Index

Abstract	3
Introduction	
Objectives	
Justification	
Theoretical Framework	
Methodology	
Results	
Conclusions	28
References	29
Annexes	31

### **Abstract**

In the daily work of a teacher it is necessary to use a methodology that guides your actions and those of your students. One of these methodologies is gamification, which covers a large number of resources such as video games. However, despite their virtues, there is a much earlier type of game that combines its best: board games. Board games are widely popular and are part of global culture, providing many well-known variations.

It is for all this that board games are used as educational resources, with capacities that can be even superior to those of virtual games or educational video games. And they can be used specifically in the teaching of foreign languages.

With these ideas in mind, my goal is to demonstrate that board games can be valid educational tools equal, if not superior, to the virtual games and resources currently used in Primary education. To do this, I use a research method based on data provided by academic sources to compare both types of games based on their characteristics and value as an educational resource.

Furthermore, to carry out a more exhaustive work and base my work not only on theoretical data but on practical cases and experiences, my research also includes interviews with teachers to support my project and demonstrate the very small vision that we have of board games in the school environment.

I seek to obtain a solid analysis of the validity of board games as an educational resource and to sequence a functional conversion system to turn them into effective tools for language learning, which could claim the importance in education of resources not based on computers or virtual sources.

<u>Keywords:</u> Gamification, Board games, Teaching Resources, Creativity, Conversion system.

#### Resumen

En el trabajo diario de un docente es necesario utilizar una metodología que oriente su accionar y el de sus alumnos. Una de estas metodologías es la gamificación, que abarca una gran cantidad de recursos como los videojuegos. Sin embargo, a pesar de sus virtudes, hay un tipo de juego mucho más antiguo que aúna lo mejor de sí: los juegos de mesa. Los juegos de mesa son muy populares y forman parte de la cultura global, y ofrecen muchas variaciones conocidas.

Es por todo ello que los juegos de mesa se utilizan como recurso educativo, con capacidades que pueden ser incluso superiores a las de los juegos virtuales o videojuegos educativos. Y pueden utilizarse específicamente en la enseñanza de lenguas extranjeras.

Con estas ideas en mente, mi objetivo es demostrar que los juegos de mesa pueden ser herramientas educativas válidas iguales, si no superiores, a los juegos y recursos virtuales utilizados actualmente en Educación Primaria. Para ello, utilizo un método de investigación basado en datos proporcionados por fuentes académicas, para comparar ambos tipos de juegos en función de sus características y valor como recurso educativo.

Además, para realizar un trabajo más exhaustivo y basar mi trabajo no sólo en datos teóricos sino en casos y experiencias prácticas, mi investigación también incluye entrevistas a profesores para sustentar mi proyecto y demostrar la escasísima visión que tenemos de los juegos de mesa en el ambiente escolar.

Busco obtener un análisis sólido de la validez de los juegos de mesa como recurso educativo y secuenciar un sistema de conversión funcional para convertirlos en herramientas efectivas para el aprendizaje de idiomas, que puedan reivindicar la importancia en la educación de recursos no basados en computadoras o fuentes virtuales.

<u>Palabras clave:</u> Gamificación, Juegos de mesa, Recursos Didácticos, Creatividad, Sistema de conversión.

# Introduction

Thanks to this degree, I have learned that it is a teacher's job to be a guide and counsellor for his students. It is a task that we must carry out every day to help children reach their maximum potential through creative proposals, especially in areas to which negative aspects are attributed. One of these is language teaching, which, although highly valued, is not usually associated with fun or creative techniques that allow students to develop their own learning. As teachers, from the beginning of our training as professionals we are taught to value the small differences of students, as well as their abilities and limitations. And one of these skills that I have always thought is not given as much importance is creativity. Creativity is a fundamental element in the personal development of the student, so it is our responsibility as teachers to educate in creativity to enhance their abilities.

Throughout the history of education, hundreds of teaching styles and strategies have been created, depending on the time, place and culture. Some of these are still used today and many others have disappeared or have evolved. And it is precisely for this reason that the methodologies that exist seek to effectively guide the actions of the teacher and the students, but allowing changes or alternative resources to be introduced if this is necessary. However, all the resources that can be used must always be subject to two main issues: their own explanation and why they are used and their adaptation to the educational context in which they are set.

One of those possible resources that is being used more every day in classrooms are games. According to López Regojo (2023), through gamification, cooperative activities and simple projects, the concept of learning is beginning to unite with that of enjoyment in recent times. Due to the massiveness of social networks and technological advances, video games are having a great moment, even in education. However, as a future teacher, I have my problems with the overuse of these types of virtual resources.

Among other things, because I see them totally focused on the most theoretical content possible, abandoning the human factor and limiting the actions of the students and their own creative capacity. Something that their predecessors, board games, do not do. And not only that, but the latter are completely valid resources within the world of education, but they have been overshadowed by their more "advanced" versions.

# **Objectives**

For all the above, this TFG's main objective is to demonstrate that board games can be valid educational tools superior to the virtual games in many aspects, since they have unique characteristics that facilitate experimentation and the creative sense while we learn. To do this, it is necessary to analyse board games as an independent element and review their limited history in the world of education. Each alternative proposal represents a great advance in the use of these resources that goes in the opposite direction to the increasingly abundant virtual games.

In addition to all this, it is also an important objective to claim the importance of the most dynamic educational resources that reward creativity and originality. All of this, within a specific framework based on the teaching of the foreign language, which has not been explored as much yet. Finally, in reference to the Degree in Primary Education itself, this work fulfils the following objectives that the degree offers:

- Design, plan and evaluate teaching-learning processes, both individually and in collaboration with other teachers and professionals at the center.
- Effectively address language learning situations in multicultural and plurilingual contexts. Promote reading and critical commentary of texts from the various scientific and cultural domains contained in the school curriculum.
- Reflect on classroom practices to innovate and improve teaching work. Acquire
  habits and skills for autonomous and cooperative learning and promote it among
  students.
- Know and apply information and communication technologies in the classrooms. Selectively discern audiovisual information that contributes to learning, civic training and cultural wealth.
- Understand the function, possibilities and limits of education in today's society and the fundamental skills that affect primary schools and their professionals.
   Know quality improvement models with application to educational schools.

#### **Justification**

Since I started my Primary Education degree, I had the idea of becoming a teacher who did not follow the traditional learning model, focusing on the uniqueness of the students and their creative capacity. And the knowledge that I have acquired during my training at the university has helped me transform my ideals about school and education itself.

That is where the issue of teaching through board games appeared in my mind, since they are a novel resource and, as we are going to see, they can greatly benefit the development of the students' learning. The collaborative aspect of board games is one of the reasons why they can be a valid tool in an educational context.

It is well known that, as teachers, we must promote a cooperative work environment in the classroom, to teach students the importance of sharing or facing problems. All of these are basic skills for a good teacher that can be carried out, among other ways, through board games and their adaptation to the classroom context.

For us it is also an opportunity to explore our capabilities and limitations, since this type of resources brings us closer to the children, thus being able to carry out our teaching practices within a more concrete and closed area. Another circumstance that we must face in classroom programming is diversity, which is completely excluded in games, as well as gender equality, since they are not important factors when playing.

If we talk about the situation of board games at the schools, this type of game is once again an advantage, because they are still an innovation within the annual programs in schools and function as active projects. And as for our role as tutors, these original and dynamic resources put into practice the social skills of both students and teachers, allowing them to work on communication within the classroom.

It is for all the above that I decided to research the use of board games in the educational field. And seeing that they are not used very often, while virtual resources are becoming part of many strategies and methodologies around the world, I concluded that I wanted to address this topic in my TFG and present my study, backed with data and professional studies, to prepare an appropriate proposal.

#### Theoretical Framework

In order to understand the scope of my work and its approach to board games as an educational element, we must first know the methodology that encompasses all these types of resources and their characteristics. Many pedagogues, such as Werbach and Hunter (2014), have studied the implementation of the game world in the educational field. Specifically, an active methodology that is quite recognized today: gamification. This teaching technique finds space for fun and a competitive spirit in school, while focusing its products on learning strategies and content of the different subjects in which it is used.

It is important to talk about gamification as a starting point for the use of recreational elements in the classroom, since this methodology supports the development and acquisition of knowledge. Through progress in the field of teaching, countless definitions and research works have emerged about this element, all of them with a very similar series of characteristics.

For example, according to Lee and Hammer (2011), this methodological strategy is "the use of game mechanics, dynamics, and frameworks to promote desired behaviours." (p. 4). In this definition, they refer to gamification as an active exercise of implementing the elements of games to achieve desired objectives.

In the case of Caponetto, Earp and Ott (2014), they describe it as "the application of game mechanisms in non-gaming environments with the aim of enhancing the processes enacted and the experience of those involved." (p. 50)

Once again, it can be seen that the main element of this methodology is the extraction and use of different rules and mechanics from the game world, taking as reference a context not related to them. Therefore, using this type of entertainment as a teaching resource in a classroom using all of its elements is not a bad idea.

According to Werbach and Hunter (2012), these elements or parts of the gamification are divided into three categories structured at a hierarchical level, depending largely on their degree of abstraction with respect to the game itself, as well as their priority in the development of the activity:

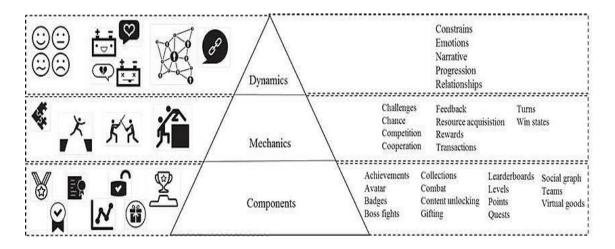


Figure 1. Table of the elements of gamification by Werbach and Hunter (2012)

- Dynamics: they refer to the first steps to take into account when using this methodology. The "dynamics" must give meaning to the theme and reason for the game. These include the narrative it contains, the progression it shows or the social relationships it can give rise to.
- Mechanics: they make up the basic processes that allow the necessary actions of the game to be carried out and for the player to be part of the game at all times. There are a large number of mechanics that provide personality and structure to the game, but some of the most relevant could be rewards, rules, competition or cooperation, and chance within the simplest processes.
- Components: finally we find the components. We designate components as the most specific elements, the most visible during the course of the game or activity. Some examples would be the characters and teams (if any), the achievements that players can achieve, the challenges to complete and the classification that is followed, (whatever type it may be).

However, this methodology is not the only one that integrates game mechanics into its structure. Another teaching technique that also uses these elements as a resource for education, although perhaps in a slightly different way, is Game-Based Learning. According to Plass, Homer and Kinzer (2015), it is a type of methodology that employs games played with well-defined learning objectives, finding a balance between providing solutions to the contents or problems of the subject and giving presence to the gameplay of the students.

They also point out that the games that make up the Game-Based Learning method are not necessarily video games, since it is possible to carry out an activity of this type in a classroom and in writing or orally. This is related to the implementation of the teaching process, within the game itself. An example taken directly from the previous article comments on the difference between these methodologies as follows:

Consider as an example the gamification of math homework, which may involve giving learners points and stars for the completion of existing activities that they consider boring. Game-Based learning of the same math topic, on the other hand, even though it may also include points and stars, would involve redesigning the homework activities, using artificial conflict and rules of play, to make them more interesting and engaging. (p. 4)

In this way, we understand gamification as a didactic approach using game-like mechanics, while game-based learning involves students as players and designers.

Within these methodologies we can find many types of games, such as physical games (Hide and Seek, Tag Team...); board games (Chess, Parcheesi...); or a more historically recent type, video games. All of them are valid and functional resources for gamification or game-based learning, although some are functional without requiring work or adaptation by the teacher.

For example, a well-known game is hide-and-seek, in which a player must find the rest of the participants to win. This can be brought to the classroom, or at least some of its mechanics. The same thing happens with the game of chained words or Hangman, known for the first time in the United Kingdom according to Gomme (1894) and later expanded to other nations such as Spain and France due to proximity or to North America due to historical circumstances.

All of these popular games may contain curricular elements or multi-subject strategies, such as linguistic elements or spatial memory. And furthermore, they are complete resources that already have a clear intention. That is, without undergoing any type of modification, they offer a method of teaching curricular content. For example, the game of Hangman can be played without modifications in English or Spanish lessons. In the case of hide-and-seek, the spatial memory and the senses that are required to play it can make it a useful tool in the Science classroom.

As we can see, there are various cases in which games can function as an educational resource without the need to work on them. In methodologies linked to games, this circumstance can be common and differentiates them from other teaching techniques that do not integrate this type of resources.

Furthermore, an important point that gamification and game-based learning value is that the contents are close to the students, to promote a comfortable environment that reflects elements of their daily life. Within this context, popular games meet this requirement, since they have been part of the earliest phase of entertainment in many children's childhood.

There are other types of games that are present in these methodologies and that are consistently used as educational resources. This, for example, is the case of video games, through which virtual platforms have been developed for educational activities such as Kahoot. According to Tavinor (2009), this type of game should not have an exact definition, since in order to specifically define what a video game is, it is first necessary to know and delimit what we consider it to be.

For example, if we take a deeper meaning of the term, we could say that it is an immersive game that gives its players total or partial control of it through an audiovisual medium. On the other hand, if we take only its physical and mechanical qualities, we would say that a video game is an artefact in a visual medium that fulfils the intention of entertaining whoever uses it.

Despite this dilemma about what a video game really is, what several authors share about this resource is that they have certain positive qualities for teaching in the classroom, although of course they also bring with them a series of drawbacks. For example, Núñez-Barriopedro, Sanz-Gómez and Ravina-Ripoll explain in detail that video games are positive in education, since they allow students to enjoy the experience through a very attractive audiovisual medium (2020).

However, they also emphasize that this great utility is always in a favourable context and in which students have established a previous knowledge. According to them, the aggressive elements and immersive capacity of video games make them highly addictive, as well as a risk factor for students' academic performance and their attention span.

These problems are not present in board games, which I have always personally preferred and have chosen for my proposal. This is because video games encourage completely enjoyment only, but their counterpart seeks to teach some rules or elements of the game, so that you interact with the medium in a very different way.

We could define board games as a type of game that can be made up of a board, chips, and elements of chance such as dice and pieces. Although it is not necessary to have all of these elements (as in the case of Hangman, in which we do not have tokens or elements of chance), all of them can be present within this type of game. In addition to this, all board games must be played on a flat horizontal platform, usually a table, which is where their name comes from.

If we go back to their origin, Hinebaugh (2009) comments that board games were played in ancient times in China, Egypt or Nigeria and advanced to the rest of the world, evolving and taking other forms and variations over time. Some like the Senet, the Mancala or the Mehen are so old that even their functioning is lost in history.

Regarding their presence in the educational world, Hinebaugh states that board games were already used to teach in ancient times, but it would not be until schools in North America, Russia and Holland began to use them, that there would be evidence of this. type of resource in academic institutions. For example, in Minneapolis Primary schools they use Monopoly as an educational resource and in France, Japan or Argentina the game called Go is very common in schools.

However, there is a reason why it took so long for board games to reach schools. As Donovan says in his book *It's All a Game* (2017), in the past these games, especially those that offered some type of fight or war challenge between the players, were thought of as entertainment and, in the best of cases, as a test, a confrontation that showed the intellect of the participants.

Although board games could be used to teach concepts to the young students, the solid strategy sought by games like Petteia (precursor to Chess) was not attributed to children or poor people.

Without counting the so-called "game of Ur", (which is estimated to be one the first board games in history, dating from ancient Mesopotamia), all of these war and strategic games were played by kings, emperors, nobles and, in general, for the richest and most powerful people.



Game of Ur

But after all social advances and after becoming one of the main methods of entertainment, board games in the field of Primary education are still a relatively recent resource. Some researchers such as Ramani, Siegler and Hitti in the Journal of Educational Psychology (2012) carried out various studies about the approach of these sources of entertainment to the educational world. However, research work such as this served more as a theoretical framework and as an approach to this resource. Furthermore, some people in the sector were already beginning to see problems in how teachers saw this resource and the real way in which it reached the school.

A few years ago, the directors of Devir, one of the largest board game companies, was interviewed after a large wave of game conventions that took place in Primary schools and vindicated his idea of how the game should be understood in an educational context. Both appear below, taken from the newspaper 20minutos:

Eso de "si tu hijo suspende matemáticas, déjalo jugar al ajedrez" me asusta. No funciona así; no se puede utilizar como una cuestión curricular que acaba siendo aburrida y obligatoria y acaba expulsando a los niños de la afición. Ayuda saber ganar y perder. Y no existe discriminación por razón de sexo ante una junta. (2017)

Hay muchos colegios que ya están haciendo cosas con juegos de mesa, pero se hace porque hay un AMPA proactivo o algún profesor loco que sabe de lo que habla y lo hace de forma voluntaria. Pero debemos romper esta dinámica. Nosotros lo creemos como un recurso educativo, y hay que saber utilizarlo bien. (2017)

Board games' potential as a cognitive exercise has always been recognized and taken advantage of Garrido-Sánchez and Crisol-Moya (2023) developed a literature review study about articles published in scientific journals of the last century. And in most of them highlight the ability of the games to enable different learning opportunities, provide immediate feedback and achieve longer-lasting attention.

# Methodology

Once the differentiation between board games and their virtual counterparts has been adequately explained, the history that they occupy in the world of education and the methodologies that is most used close to games, I have structured the knowledge acquired into ideas, but from the point of view of a teacher and not just a player. These ideas, which have led me to look for a plausible alternative to teaching through the use of board games, would be the following:

- From the beginning of the school, in its first approach, it was conceived as a space for leisure and enjoyment.
- Board games, until relatively recently, were an intellectual exercise that served to test the knowledge and ability of those who played them.
- Board games historically constitute an important part of the social dimension of humanity.
- Through social advancement, board games and the vision that humanity has of the latter are changing and the games undergo changes and adaptations.
- For a few years now, board games have also appeared in an educational context.

And, reviewing this last idea, I stopped to think that many teachers may be using board games in school today, but it is possible that various complications may arise during their planning or implementation in the classroom. To have a more structured and truthful opinion, I carried out a very simple survey of different Primary Education teachers, those I know personally and some who taught me when I was a child.

In this survey, which I carried out through a personal interview, I was interested in knowing the teachers' relationship with this type of games, if they already used it or had it in mind and if they believed that board games can actually be a valid and regularly used resource.

In the following table I present the survey prepared and just below some of the responses of teachers interviewed:

Years teaching	-
Courses in which he/she teaches	-
Subjects he/she teaches	-
Personal relationship with board games	-
He/She has put this resource into practice in the classroom or not.	-
Opinion about whether board games are a valid educational resource	-
Opinion about whether board games are a valid educational resource in language teaching	-

Table 1. Survey model table. Own work

Years teaching	24 years teaching		
Courses in which he/she teaches	First Cycle Second Cycle		
Subjects he/she teaches	Music, Science and Maths.		

Personal relationship with board games	"I have always loved board games since I was little, both the most traditional ones like Chess to Monopoly or Catan."
He/She has put this resource into practice in the classroom or not	"In some subjects I have used video games from educational pages, but not so much board games. I feel that a lot of preparation is needed and in a school all the time is necessary."
Opinion about whether board games are a valid educational resource	"I think they can be used. I'm not sure how they could be implemented into a school schedule, or if there would be enough time to be able to develop a lesson to teach the content during the hours of each day. But I see it as very possible to use games to teach.  There are methodologies even about games and creating competitive situations, right? Like gamification, for example, or Problem-Based Learning, which also has its small puzzles or tests. So yes, I think they are an option."
Opinion about whether board games are a valid educational resource in language teaching	"With language teaching I'm not so sure anymore. I don't want to say that board games can't be used, but I can't imagine which one you could use or in what context.  For example, Chess is related to Maths. But I don't associate languages so much; I wouldn't know how to answer you."

Table 2. First answer.

Years Teaching	32 years teaching
Courses in which he/she teaches	Third Cycle Second Cycle
Subjects he/she teaches	Maths, Science and Technology
Personal relationship with board games	"I like them very much. I have never been a regular player or a passionate one, but I have spent my time playing various games."
He/She has put this resource into practice in the classroom or not.	"Well, I don't think I've ever used them. It hasn't been anything personal or because I see them as useless, but the opportunity has never arisen. I would also say that I haven't played any board games on a personal level for about a couple of years. Being a teacher is a daily job, which takes up a lot of your time."
Opinion about whether board games are a valid educational resource	"I think that, although they can be used and there are already educational strategies that are based on playing, such as gamification, it is very difficult for a teacher to find a game that, by itself, is perfect for what you are looking to teach."
Opinion about whether board games are a valid educational resource in language teaching	"I tell you practically the same thing as in the previous question. I am not an English or Spanish teacher but I am sure that the same thing should happen in language teaching."

Table 3. Second answer.

Years teaching	17 years teaching	
Courses in which he/she teaches	All courses	
Subjects he/she teaches	Special Education (all subjects)	
Personal relationship with board games	"I remember when I was little that I loved Chess and Parcheesi. I also tried Risk a little older and have played a lot of Monopoly. In general I like them a lot, although in recent years I haven't played as much,"	
He/She has put this resource into practice in the classroom or not.	"Of course I use them. They are very helpful in teaching children with special needs. In addition, there are many educational games designed specifically for children."	
Opinion about whether board games are a valid educational resource	"As I said in the previous question, I find them very useful. It is true that I do not see the most traditional, purest games in a school context. But it is normal, because they are not dedicated to learning content itself."	
Opinion about whether board games are a valid educational resource in language teaching	"I see it the same as with the rest of the subjects. There are physical games and virtual games that are made for children, so I do think they can work. But I think the usual board games are a bit removed from school."	

Table 4. Third answer.

As can be seen in the responses to my survey, teachers do believe in the possibility of using board games as an educational resource. However, they refer to problems that may arise during its use or during class planning. Important issues are mentioned such as preparation time, how different they are from school content or the existence of other alternatives that are considered similar, such as educational games or related methodologies such as gamification or Problem-Based Learning.

These are important concepts, which confirm, at least on a small scale, that there are teachers of various ages who trust in this type of resources but see it as not very accessible in relation to the time available as a teacher. This is why I began to think about this problem and, through experimentation with trial and error, I wanted to provide an alternative applicable to Primary education with board games as a central resource. For this reason, I have developed a conversion manual through which to convert almost any board game into an educational game, but respecting its system and its original intentions.

To make it easy to apply and complement the sequenced processes of any similar methodology, the manual consists of a total of six phases through which the teacher will carry out the usual tasks of this profession and also those of a creator of game. However, before beginning to explain the resulting product in depth, it is necessary to explain two essential details:

The first thing is to analyse the starting point of the manual, since for a teacher it is vitally important to know exactly where his activity begins in the planning process. Unlike other methodologies such as Project-Based Learning (PBL, (which arises from a real situation and begins with a statement of the problem or circumstance), this conversion manual covers the teaching process from the selection of contents that are intended to be explained.



Steps in the PBL

Once what you want to teach has been specified, work will continue on the board game in question until it is put into practice and a subsequent evaluation. All of this will be explained and detailed in depth below.

The second point to specify is that, although the objective of this work is to teach English as a foreign language through board games, (so the example that appears will focus on it), the conversion manual is designed to be used in any discipline or subject. All this thanks to the already mentioned ability of board games to relate to content of any kind. I think it is important to highlight the scope of this resource, because I intend to show a valid alternative to teaching foreign languages. And I believe that covering any area has a greater effect than limiting oneself to a single subject. That said, on the following pages I detail this manual in greater depth.

#### **Results**

# Board game conversion manual

- The following manual is intended to serve as a skilful resource for the use of board games in the educational area and the creation of original products within a classroom context. Teaching must be the final objective, but not the only one, of the conversion process. Relevance must also be given to the creative abilities of the teacher and his ability to design and structure the educational resources he uses. Besides. The interest of the students can never be neglected and enjoyment must be present during the creative process along with the educational intention.
- While this manual is useful to guide the teacher in the creation of motivating materials that can be adapted to the specific needs of their classroom, it is important to say this proposal requires a certain amount of time and creativity from the teacher.

# Phase 1: Planning

In the Planning phase the teacher must organize his thoughts, teaching goals and the elements of the classroom in which he/she finds himself/herself. The board game is still a future and distant resource, which will only be available once the contents or strategies that are intended to be taught to the students are known.

First of all, the teacher needs to establish the contents and competences to be acquired, which will ideally be part of the teaching curriculum. Then, the teacher needs to take into account the classroom context, the number and age of the students who will participate, the available materials, the time constraints and other educational situations. Besides, students with special needs will also be considered, so that all students can take part in the game and enjoy equally, creating a good classroom climate.

Once this context has been specified and the main difficulties of the group, the available resources and the planned timing are known, it will be easier in the subsequent phases to work with the selected material and adapt to this frame of reference. To clarify and exemplify each step, let's look at a specific hypothetical case:

- We are teachers of English as a Foreign Language (EFL) in Year 4. We have a classroom with twenty students, twelve girls and eight boys, none of whom has special needs. We have three hours of our subject per week, (Mondays, Wednesdays and Fridays). The material with which we can work in the classroom is somewhat limited, since it is not equipped with a projector or touch screens.
- Due to the limited number of virtual resources, we decided to use a different methodology for the contents that we must teach soon. We take a look at the curriculum of LOMLOE at page 34506 and we find that the next thing our students must learn are the expressions used in social conventions and the rules of courtesy like: "See you soon!", "Good afternoon", "How are you?"; "You are welcome!" or "Can I ...?".

# **Phase 2: Observation**

In this second phase we already have the idea, the justification of why we use this resource for the next sessions of the subject and we know what type of game they might be most interested in, (whether it is a card game, a role-playing game, a game of chance or something else). However, we are still missing the element on which our work will revolve: the board game.

Using more than one board game would mean mixing mechanics and main elements of both games, which in many cases would be a greater burden for the teacher as the creator of the dynamics and a greater burden for the student as a player. Furthermore, there are board games that have very different, even opposite objectives and developments.

For instance, Chess gives a unique value to each piece, having different moves and different levels of importance. In this game, the board and its squares are only a method by which to reach the opponent's pieces, especially the king. However, in the game of Parcheesi these roles are reversed, with all our pieces being exactly the same as each other and the true importance of the game focusing on the squares of the board and what they provide us.

As we can see, these two games are contrary in their mechanics, to the point that one is played using the pieces themselves and the other using dice. Therefore, these two board games are incompatible on many levels, from its main objective to its most iconic elements.

That said, the selection of the board game is the pillar that supports the rest of the proposal. A bad choice would cause the teacher's work to become tedious and even repetitive in later phases. And on the other hand, a game that does not fit the chosen content would result in an empty learning experience for students. This is why in the Observation phase our main task is to screen possible board games to work with, until we find one that suits our needs.

#### (Parcheesi and Goose Game)



- In our hypothetical case, we have already decided what we want to teach and we know that, if we need more than a single session, we have three per week. We know that our students like to be able to compete against each other but also work as a team, so a game that meets these requirements could be a great option.

This is when two board games that we know well come to mind: Parcheesi and the Goose Game. The advantage of using these games is that they are easily available, and students are al-ready familiar with them, so even if we change the mechanics of the game, the students will be able to play correctly. Other commercial games that share some of the same characteristics, like Carcasonne or Impulse System, may not be so readily available and the rules might be too complex for the students.

However, both may not be equally effective considering the contents and their possible implementation. In order to choose one, we must carefully observe its functionality and internal structure. The term functionality refers to the game's ability to function on a practical level, while its internal structure is the element that regulates its rules, objectives and elements. If both fulfil their function, that is, both are useful and can be used comfortably in this context, it is the internal structure that will help us choose one of the two.

On the one hand, Parcheesi offers us the competitive factor that we have already mentioned, as well as the possibility of working as a team with each child controlling a piece of whatever colour. In general, these conditions are also met in the case of the Goose Game, in which teams can compete and each token belongs to one student.

On multiple occasions, once the characteristics of the games and their objectives are reviewed, it will be enough to compare them and see which one is closest to what we are looking for. In the event that this does not happen, as in this example, the last differentiating element that will allow us to choose one game or another will be the resources and insubstantial areas.

Insubstantial areas (known colloquially and unofficially in video games) are those parts in which players only wait to be able to interact again or perform an action, since there is no relevant element in them. In board games these areas do not exist as such, but there is something similar: the limiting elements.

- Limiting elements are known as those rules or parts of a game that reduce the player's action capabilities, in order to lengthen and improve the gaming experience. These elements are what greatly differentiate the useful life of a game, such as the safe squares of Parcheesi so that a piece is not eliminated or the ineffectual squares of the Goose Game, in which nothing happens and you only pass the shift.
- Knowing this, we must pay attention to these areas and limitations and analyse which ones fit the worst with our idea or proposal. Once we have done this, through a process of comparison and justification, we can continue working with the chosen game.
- In our example, we know that Parcheesi is very fun and competitive, but it does not offer space for students to interact with each other or with the content: they either advance or eliminate each other. As our intention is to encourage communication between our children and for them to carry out activities with the selected content, we decided to choose the Goose Game and its squares with special rules, such as goose squares or bridges.
- This option allows us to explore a more varied board full of opportunities for children to experiment with the selected content and skills, since in terms of teamwork, none of these games offer an approach to it in the first instance.

# Phase 3: Preparation

At this stage we have already chosen the game we are going to work with and we have taken a look at its structure, since it is necessary to analyse its characteristics in the previous phase. In Preparation, the teacher's duty is simple: leave the board game as simple as possible and later turn it into the educational game that we seek to obtain.

In order to do this, we will take the internal structure of the board game we are working with and, after analysing its most important points, we will discard those parts that are limiting or that seem useless in our final product. Although it is an important and necessary task to develop our resource, it is necessary to understand that experimentation plays an essential role in this phase. We do not pretend to be board game analysts, our role is to create an educational resource and teach through it.

Therefore, if we remove parts from the original game that we later miss, it is not too late to change it. Perhaps at first a limiting element seemed worthless to us, but once we see what it contributes to the game, we realize that it is necessary for the proposal that we will bring to the classroom. It is at this stage that teachers must take their own teachings as a reference and not fear failure, since, as we know, it is an important part of learning.

It is also important to emphasize that, unlike the other previous phases, once we are in phase four of the manual, we can return to the third as long as it is an isolated element. It will never be necessary to restart an entire phase if it has already been completed successfully, since otherwise you would have skipped an essential step in the manual: analysis and implementation.

- In our example, we already have our board game: the Goose Game. Furthermore, thanks to the comparative analysis that we carried out in the Observation stage we know that the greatest limiting element we have is the large number of empty squares throughout the board.
- We made the decision to remove these boxes, since they only lengthen the game but do not help the children interact with each other or approach the content effectively. And, after testing the game with this change implemented, we observe that the result is functional. It is a much simpler product than the original and shorter, but it is still consistent and can be worked with.

# Phase 4: Restructuring

This phase is the most complex of all and the one that requires the most practical work on the part of the teacher who is designing the game. For this stage we already have a modified board game, from which we have subtracted various elements.

However, the most important thing still remains: adapting the game to suit our teaching goals. Although all the games work on their own, the one we have transformed no longer has the same original internal structure, so it is no longer as well formed. To solve the problems of this half-empty product and be able to integrate the selected learning contents into it, the teacher must acquire a commitment to his/her personal work and assume the role of designer, exploring his/her ability to create an authentic product.

This is why the Restructuring phase is so complex, since it asks the teacher to investigate his/her creative ability and put it into practice to complete the game and add his/her own differentiating elements.

As it is a phase of direct contact with the game, experimentation and practical analysis are very present, just as in the Preparation phase. But while in the latter we removed irrelevant parts from an original game, in this phase we carry out the opposite process: completing and restructuring the product so that it once again becomes a valid teaching resource in the classroom. In addition to this, we can also add or modify limiting elements or parts of the game, preserving its final objective but adding other secondary goals throughout its development according to the needs of the teacher and the students.

In the Restructuring, the final result will depend on the needs and intentions of each teacher and will adjust to their interests whatever they may be. It is the most free and subjective stage and the one that expresses the creative potential of the teacher. We must pay attention to the students and their needs, to the deficiencies that the game presents after the Preparation phase, to the contents and competencies selected and to the possibilities that the game offers for its redesign.

It is also the phase before putting it into practice in the classroom, so this step should not be abandoned until the teacher has made sure to obtain a functional game, different from the original and that integrates the contents into the game mechanics.

- In our example, we start with a Goose Game that no longer has empty squares. We believe that perhaps more boxes are necessary, but that they have a practical use within the game. Due to this, all the new boxes introduced will offer a challenge for students, in which they will have to perform different exercises depending on the box.
- In some boxes they will have to recognize the courtesy phrase in certain dialogues, in others they will respond to the teacher with the most appropriate phrase according to the context that we offer them and in others they will write in incomplete sentences the phrase that best fits there. In this way, different types of exercises are combined in the classroom so that students can work both orally and in writing. If they surpass the activities, they will stay there; but if they fail, they will move back a square or two.

- We have also added an exercise in each goose square, which if they do not pass, they will not advance. And, to promote participation, each exercise will be based on oral interaction between colleagues on the same team. Although these oral activities may seem similar to those in the added squares, the goose squares have the element of interaction between peers, which also develops their communication skills. For example, a child falls into a goose square and, to advance, he or she needs to complete an oral exercise with a partner. In this exercise, the teacher will give a context in which they are (they have just met in a store, one approaches the other to ask the time...) and if they have a brief conversation using the appropriate courtesy phrases, they will be able to go from goose to goose.
- In addition, to encourage communication and cooperative work, each team will have a colour and each student will have a token. The team that manages to reach the center of the board with all its pieces first will have won. We have personally tested it once all the modifications have been implemented and it seems to work exactly, so we decided to take it to the classroom.

# Phase 5: Implementation and Evaluation

Finally, once all the changes have been made and the final product has been achieved, it is time to implement the game in class with the students. Through the game they will be able to learn the curricular contents, while the teacher must observe the results of the game during the session for possible modifications. At all times, the resource that has been created must be part of the students' learning, but also of the teachers' training, as an element of self-criticism and creative work.

As a last step and, through the conclusions drawn from the implementation in the class, the teacher must carry out an evaluation exercise on both the students and himself/herself. The students have played, but it is still a test or activity that can be analysed and assessed. And the teacher must be subject to improvement and take into account the quality and development of his/her work throughout the process, as well as its final result.

- If doubts or problems arise during the actual implementation of the game, the teacher takes notes to take them into account as aspects to improve. This can help improve the teacher's creative process and serve as an incentive to make the final product even better.
- Likewise, those issues that may arise and the communication problems that we may notice are even more important, since our intention is not for everything to be positive, but rather to resort to a more playful alternative for teaching. And this, like many others, can fail or be futile. For all these reasons, at the end of the activity, we provide a self-assessment rubric for the students and another for ourselves, through which we can evaluate the scope and progress achieved through our new board game.

#### **Conclusions**

This conversion manual, as well as my ideas and wishes about this final project, arise, as already mentioned in the justification section, as a result of my perception about teaching. The alternative of board games and recreational resources to promote a different education are a unique element that is of great interest to me. This conversion manual and the possibility it offers teachers to exploit their creative abilities is an opportunity to introduce in the world of education a new meaning to teaching, as well as to creative work.

During the research process and writing this work, new issues have been added to my mind that I would never have rationalized before, such as the percentage of use of board games in the classroom, the social nature that they had in ancient times, their historical evolution and the possibility of integrating this type of resources as another methodology in the classroom. However, the question that I have asked myself the most once I have completed the manual is: Will this alternative be valued in the centers?

And I do not think this question has a simple answer, since the world of education is constantly changing and the number of resources that exist for planning a subject is countless. Furthermore, it is well known that teaching is a profession that requires a great mental and physical workload, so exploiting the creative capacity of the teacher may be an effort greater than necessary.

Until a few years ago, board games have been considered sources of entertainment or mental exercises, so it is still difficult for me to see them in an educational context on a regular basis. Although it is also true that the teacher's tasks do not only include teaching and that, for many, using such a resource could be a kind of escape valve from the usual routine.

According to Horn and Little (2010), on many occasions teachers end up being victims of negative situations and mental exhaustion, reaching the situations that these two authors call: "the phenomenon of normalizing." That is, treating this series of problems as another phase of life as if it were something normal.

And, although I do not know if board games as a methodology would be a definitive or beneficial resource for this phenomenon, I am sure that they are an alternative that could improve the teaching paradigm at least to a certain extent. The new generations of teachers are little by little filling the schools and using methods that are far from traditional teaching such as gamification, Problem/Project Based Learning...so I would consider it a great opportunity to take advantage of this methodology of content integration in recreational elements to support new teaching techniques.

#### References

- Caponetto, I., Earp J. and Ott, M. (2014). Gamification and Education: a Literature Review. Proceedings of the 8th European Conference on Games-Based Learning. 1. 50-57.
- Donovan, T. (2017). *It's All a Game: The History of Board Games from Monopoly to Settlers of Catan*. Brighton, England: Thomas Dunne Books.
- Garrido Sánchez, A. B., & Crisol Moya, E. (2023). Revisión sistemática: Beneficios de los juegos de mesa en el ámbito de la educación social con menores de entre 6 y 18 años. *Education in the Knowledge Society (EKS)*, 24, e28528. https://doi.org/10.14201/eks.28528
- Gomme, A. B. (1894). *The Traditional Games of England, Scotland, and Ireland* (Vol 1). London: Nutt.

- Hinebaugh, J. P. (2009). *A Board Game Education*. New York, United States: Rowman & Littlefield Education.
- Horn, I. S., & Little, J. W. (2010). Attending to Problems of Practice: Routines and Resources for Professional Learning in Teachers' Workplace Interactions.
   American Educational Research Journal, 47(1), 181–217.
   <a href="https://doi.org/10.3102/0002831209345158">https://doi.org/10.3102/0002831209345158</a>
- Lee, J. J., & Hammer, J. (2011). *Gamification in Education: What, How, Why Bother?*. New York: Columbia University
- López Regojo, Y. (2023, August 1). El uso de juegos en el aula de ELE. Retrieved from <a href="https://difusion.com/blog/el-uso-de-juegos-en-el-aula-de-ele/">https://difusion.com/blog/el-uso-de-juegos-en-el-aula-de-ele/</a>
- Núñez-Barriopedro, E., Sanz-Gómez, Y., & Ravina-Ripoll, R. (2020).
   Videogames in education: Benefits and harms. *Revista Electronica Educare*, 24(2). <a href="https://doi.org/10.15359/ree.24-2.12">https://doi.org/10.15359/ree.24-2.12</a>
- Plass, J. L., Homer, B. D., & Kinzer, C. K. (2015). Foundations of Game-Based Learning. *Educational Psychologist*, 50(4), 258–283.
   <a href="https://doi.org/10.1080/00461520.2015.1122533">https://doi.org/10.1080/00461520.2015.1122533</a>
- Ramani, G. B., Siegler, R. S., & Hitti, A. (2012). Taking it to the classroom: Number board games as a small group learning activity. *Journal of Educational Psychology*, 104(3), 661–672. <a href="https://doi.org/10.1037/a0028995">https://doi.org/10.1037/a0028995</a>
- Tavinor, G. (2009). *The Art of Videogames*. Lincoln, England: Wiley-Blackwell. https://doi.org/10.1002/9781444310177
- Tuya, M. (2017, September 19). Los juegos de mesa llegan a las aulas, para aprender divirtiéndose. Retrieved from <a href="https://www.20minutos.es/noticia/3093595/0/educacion-juegos-de-mesa/">https://www.20minutos.es/noticia/3093595/0/educacion-juegos-de-mesa/</a>
- Werbach, K., & Hunter, D. (2012). For the win: how game thinking can revolutionize your business. Philadelphia, United States: Wharton Digital Press.

# Annexes

ITEMS	BAD (1)	REGULAR (2) GOOD (3)		VERY GOOD (4)
Use of vocabulary  I have understood the new content	-			I
Speaking  I have spoken adequately and solved the oral exercises.	_	-	_	
Reading  I have understood the sentences in the written exercises.	_	_	<del>-</del>	<u>-</u>
Writing  I have correctly written the sentences that I should have in the writing exercises.	_	-	_	_
I have communicated well with my colleagues and I have been a good mate.	-	_	_	<u>-</u>

Table 1. Example of a self-assessment rubric for students

Items	I totally disagree	I disagree	I agree	I totally agree
I have established a functional product that motivates students.	-	-	-	-
The product has a solid structure and lacks limiting errors or isolated elements.	1	-	1	-
The game allows all children to participate and enjoy with their peers.	-	-	-	-
The contents are adequately integrated into the game and can be seen in how the students have understood it.	ı	-	ı	-
I have been able to respond quickly and decisively to problems generated by children's interaction with the product.	1	-	-	-
The session/s has served as a reinforcement for the students' learning.	-	-	-	-
I have known how to structure the lines of work with the product and adapt its original proposal to my own context and needs in the classroom.	-	-	-	-

Table 2. Example of a self-assessment rubric for teachers