





What does ChatGPT know about gamification in education? From AI to the human touch

*¿Qué sabe ChatGPT de gamificación en educación?
De la IA a la artesanía*

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Abstract

This article analyzes gamification in education and how artificial intelligence can contribute to its development. Gamification involves applying game-like elements to other contexts, but one of its biggest challenges is creating coherent and engaging narratives. Many teachers struggle with this aspect, which limits its implementation. Artificial intelligence can serve as a tool to generate initial ideas and structures, but it does not guarantee effective proposals on its own. Human intervention is essential to ensure coherence, credibility, and the personalization of the educational experience. The article tests artificial intelligence in creating a gamification proposal based on the television series "Game of Thrones", comparing its results with theoretical approaches and models applied in education. It concludes that human involvement is indispensable for adapting and improving proposals, leading to more immersive and motivating experiences. Additionally, teachers can incorporate elements that enhance the proposal's impact, integrating the emotional component—one of AI's greatest shortcomings. Ultimately, while this technology can be a valuable tool, the human factor remains key to ensuring meaningful and engaging educational experiences.

Keywords: education, technology, artificial intelligence, narrative, gamification, teacher's role.

Resumen

Este artículo analiza la gamificación en educación y cómo la inteligencia artificial puede contribuir a su desarrollo. La gamificación consiste en aplicar elementos propios de los juegos a otros contextos, siendo uno de sus mayores desafíos la creación de narrativas coherentes y atractivas. Muchos docentes encuentran dificultades en este aspecto, lo que limita su implementación. La inteligencia artificial puede servir como herramienta para generar ideas y estructuras iniciales, pero no garantiza propuestas efectivas por sí sola. La intervención humana es esencial para asegurar coherencia, credibilidad e individualización de la experiencia educativa. El artículo pone a prueba a la inteligencia artificial en la creación de una propuesta de gamificación basada en la serie *Juego de Tronos*, contrastando sus resultados con enfoques teóricos y modelos aplicados en educación. Se concluye que la participación humana es indispensable para adaptar y mejorar las propuestas, logrando experiencias más inmersivas y motivadoras. Además, el docente puede incorporar elementos que aumenten el impacto de la propuesta, integrando el componente emocional, una de las mayores carencias de la inteligencia artificial. En definitiva, aunque esta tecnología puede ser una herramienta valiosa, el factor humano sigue siendo clave para garantizar experiencias educativas significativas y atractivas.

Palabras clave: educación, tecnología, inteligencia artificial, narrativa, gamificación, rol docente.

1. Introduction

Important contributions in teaching methodologies should be explored in the educational field, since education should be relevant and attractive to all students (Quintero-Chavez, 2024). Educational demands must be addressed through methods that are adapted to each individual, giving value to education and seeking meaningful learning (Duque-Romero and Acero-Quilumbaquín, 2022). In this context, there must be a direct relationship between what students learn and their future professional practice (Rodríguez-Gómez et al., 2018; Trede and McEwen, 2016). To this end, it will be essential to create environments that support flexibility, active learning, collaboration and interdisciplinarity in research, teaching and learning (Qureshi et al., 2023).

Following authors such as Chrobak (2017) and Giménez-Giubbani (2016), it is essential to promote teaching that prioritizes student autonomy, with proposals aligned with the demands of life in society, establishing more direct connections with their environment and responding to the needs of the future. It is even more relevant if considering Serrano and Pontes (2017) who indicate that many future teachers have a pessimistic perception about teaching in secondary education. Therefore, it is necessary to have teachers and projects capable of highlighting the value of teaching as a creative and open work, linked to innovation and research, while facing current challenges to engage students' interest, promoting the acquisition of the necessary competencies through an active and experiential approach (García-Jiménez et al., 2024; Hashmi et al., 2019).

1.1 Gamification

Gamification, which leverages elements and mechanics of games with the aim of enhancing engagement and motivation in non-game contexts, is relevant in this context (Kapp, 2012; Zichermann and Cunningham, 2011). Despite the concept emerging in the early years of the 21st century, significant academic interest began to emerge a decade later (Al-Hafdi and Alhalafawy, 2024). This lag in academic focus can be due to a variety of factors, including the need for empirical validation of *gamification* effectiveness, and the development of more robust frameworks and methods (Bezzina and Dingli, 2023; Navarro-Mateos et al., 2021).

Gamification in education aims to achieve transcendent objectives, i.e., objectives that will require influencing intrinsic motivation for their achievement (Pérez-López, 2020). Hence, it cannot be limited to a set of rewards, points and rankings, because although they can boost initial student participation, and provide some motivation, they often fail to address the nuanced needs and preferences of individual users (Bezzina and Dingli, 2023).

Therefore, it represents a great challenge for teachers, and even more so if the different learner profiles are not catered to in order to motivate and engage them in the proposal. If so, there may be a loss of interest and a decrease in participation over time in the perceived challenges, since cognitive ability and behavioral condition, which correlate with good performance, may vary according to the characteristics of the individuals and the task (Bennani et al., 2022; Rozi et al., 2019).

This impersonal and static nature of *gamification* is interesting for researchers and designers because it allows them to explore a more personalized and adaptive way of *gamification*, which considers the individual differences of users and can tap into a more intrinsic form of motivation (Bezzina and Dingli, 2023). In fact, intrinsic motivation is a key aspect when proposing a truly meaningful and transcendent *gamification* proposal (Jones et al., 2022; Pérez-López and Navarro-Mateos, 2023a), as it is the crucial element that stimulates students' efforts and commitment to achieve learning success. In contrast, extrinsic motivation was found not to exert a positive influence on students' cognitive engagement (Ngo et al., 2021).

1.1.1 Motivators and barriers

Lester et al. (2023), in the research that studied the factors that university teachers considered to positively influence the use of *gamification* in the classroom, highlighted the promotion of interactions between students and collaborative learning, and the fact that it increased fun and improved engagement. In terms of barriers, the lack of time to develop *gamification* approaches, the absence of proven benefits and management problems related to the classroom environment stand out. In fact, it is necessary to devote a lot of time and effort to design a project like this, since there is evidence showing that an inadequate

design can result in students' attitudes being negatively affected (Sabornido et al., 2022). In this sense, it is striking the lack of knowledge of many teachers when mentioning the absence of scientific evidence, since there are more and more works that show this, for example, affecting variables related to classroom environment (Pérez-López et al., 2019), psychological well-being (Navarro-Mateos et al., 2024a) or physical condition (Mora-González et al., 2020).

Valencia-Quecano and Orellana-Viñambres (2019) also analyzed the barriers in the implementation of *gamification* in higher education. Among them, they highlighted technology, strategy design, pedagogy or the relationship between teacher and student. Within the strategy design barrier, the narrative barrier should be noted, which focuses on the creation of logical lines in the established script, or in the concrete narration of the story. In this sense, the narrative within a proposal is essential, since it is the key element that should articulate a *gamification* project in education (Navarro-Mateos and Pérez-López, 2022; Pérez-López and Navarro-Mateos, 2023).

1.2 Artificial intelligence

The inclusion of technology in education represents a reality in today's society, and its appropriate use is considered the most important resource for increasing academic development (Atencio-González et al., 2023). It facilitates access to digital content and the development of competencies that help education adapt to current needs (Sánchez-Prieto et al., 2017).

Artificial intelligence (AI) has been introduced into our daily lives, playing novel roles that make it one of the main drivers of change in socio-economic life (Jian et al., 2022). In its beginnings, it was more linked to areas related to engineering, but nowadays it has become a key element in teaching-learning processes, providing new tools to redefine and reinvent traditional training processes (Moreno-Padilla, 2019). In fact, among the applications of AI, three main approaches stand out in the training context: chatbots (conversational software agents), the creation of online platforms that bet on an autonomous learning approach and educational robotics (Moreno-Padilla, 2019).

ChatGPT is a technological tool, materialized through AI chatbot, which can generate highly

accurate content in a few seconds, starting from the questions posed to it (Diego-Olite et al., 2023). It has been progressing significantly due to its multiple possibilities, becoming a great opportunity for teachers, when identifying assessment strategies or creating innovative pedagogical solutions (Dempere et al., 2023).

2. What does ChatGPT know about gamification?

The first thing to keep in mind when dealing with this chatbot is the information that appears just below the text box: «*ChatGPT* may contain errors. Consider verifying important information». Hence, it is important to question everything that *ChatGPT* shares, so that the human filter can detect the possible lack of accuracy of the information obtained. In fact, as Deleon-Villagran (2023) states, the cold accuracy that AI possesses requires the validity and support of experts to review and certify the information.

Therefore, the aim of this article is to test AI, checking the information it provides in relation to *gamification* in education: what it consists of, what are the main elements that make it up, and some concrete examples, contrasting it with the scientific literature, analyzing it with a critical and human perspective to complement the information obtained.

2.1 What is gamification in education and what are its main elements?

Faced with this question of what is considered gamification in education, the answer given by the AI is the following: *Gamification* in education refers to the use of elements, dynamics and principles typical of games in educational contexts with the aim of motivating, involving and improving student learning. In addition, in practice, *gamification* can include the use of points, badges, levels, challenges and rewards, which are integrated into academic activities to make learning more interactive and fun. Doing so promotes an environment in which students are more motivated to overcome challenges, collaborate with peers and improve their performance.

In this case, the AI uses a very generic definition of gamification, which can generate confusion in readers, since it includes elements that are directly connected to extrinsic motivation, such as points,

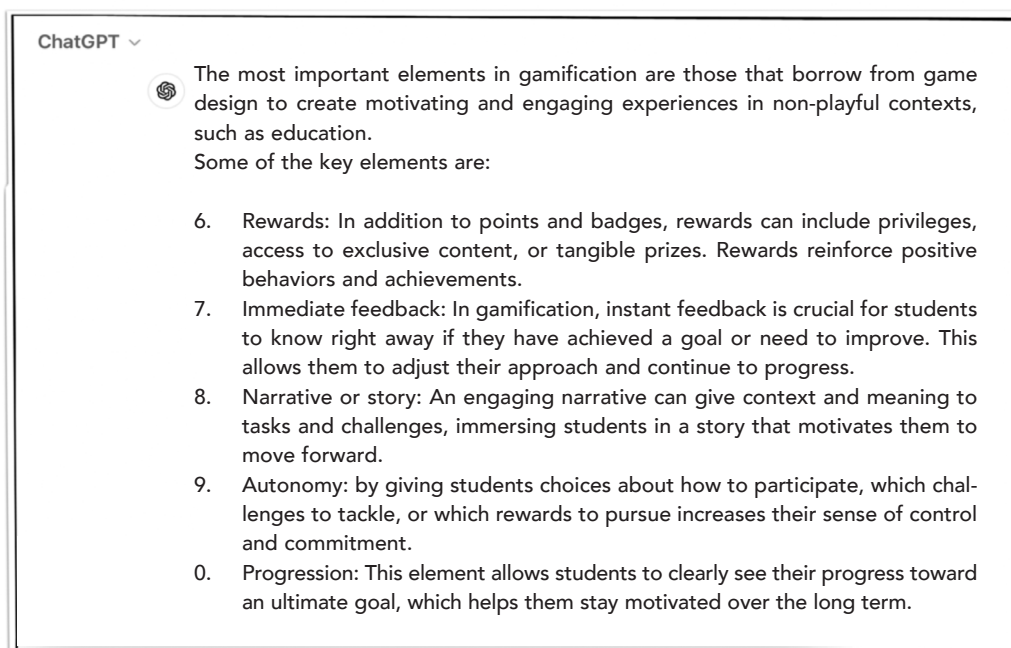
badges or rewards. Thus, the information provided by the AI is inaccurate, as it is much closer to a PBL (Points, Badges and Leaderboards) approach than to *gamification*. Authors such as Kapp (2012) or Marczewski (2018), say that *gamification* should have a much richer and deeper meaning, not being limited to the use of badges or rewards. It is necessary to clarify that *gamification* is not synonymous with fun, an idea that can end up trivializing the term, but rather with emotion (Pérez-López and Navarro-Mateos, 2023b). A well-thought-out proposal assumes a great emotional management in students, a fundamental aspect so that, as expressed by neuroeducation, learning takes place (Mora, 2017).

It would be much more interesting to use the definition proposed by Pérez-López (2020), who understands gamification as:

Captivating students to immerse them in an adventure that allows them to achieve an educational purpose that transcends the end of the experience, based on an exciting purpose and where the challenges and resources posed by the teacher (guide, but not protagonist) must be coherently integrated into the narrative that has been constructed (p. 39)

When asked about the most important elements, *ChatGPT* provides the information presented in Figure 1, where it numbers and develops them.

Figure 1. *Fundamental elements in gamification for AI*



Striking in Figure 1, for example, is the fact that points or leaderboards appear before narrative or a sense of progress. According to the «10-40 Model» (Pérez-López and Navarro-Mateos, 2023a), most of the elements highlighted by *ChatGPT* would be triggers that would enrich any educational proposal, but would not be the key pillars for designing a *gamification* project. These pillars would be the following: Transcendent objective, thematic, exciting purpose, actions and emotions, challenges and missions, *feedback*, care for details, *in & out*, «game» rules and intrigue campaign.

It is interesting to focus on the concept of *flow* or flow channel, closely related to intrinsic motivation. This state is highly desirable in any training process, as it characterizes by facing attainable challenges in which continuous *feedback* allows for a sense of progress, and adjusting actions according to that feedback. When a person is in *flow*, their concentration levels are high, they have a sense of control over their actions and perceive the activity as intrinsically rewarding, so that the final goal is often just an excuse to enjoy the process (Nakamura and Csikszentmihalyi, 2002).

When asking *ChatGPT* how to generate the flow channel, presented by Csikszentmihaly (1997), in an educational *gamification* proposal, its answer is the following: To generate the flow channel proposed by Mihaly *Csikszentmihalyi* in an educational *gamification* proposal, it is essential to design an experience that carefully balances the level of challenge and the skills of the students, maximizing intrinsic motivation. Once again, the human factor is an essential component, since the teacher is the only person capable of knowing the needs and level of competence of the students. All this will be fundamental to adapt and adjust the challenges to generate meaningful learning, based on their individual characteristics. According to the results obtained in previous proposals, the teacher is a differentiating factor in this type of project, as it encourages greater student involvement and satisfaction with the proposal (Navarro-Mateos et al., 2024b).

2.2 Is there an example of gamification in education?

The idea in this phase is to check what *ChatGPT* understands as an example of *gamification*. The answer was: An example of a gamified activity in education could be a «*Digital Escape Room*» to review concepts of a specific subject. As seen, there are quite a few serious conceptual errors, which can generate confusion about what *gamification* is and implies.

The concept of *gamification* cannot be reduced to a specific activity (Pérez-López and Navarro-Mateos, 2022) because, as mentioned above, it seeks to achieve complex, transcendent objectives. Thus, it makes no sense to speak of gamified activity or task, since these are specific, and require a reduced time for their conduction. The intrinsic motivation of students cannot be developed through specific activities because, as Deci and Ryan (2002) say in their self-determination theory, it is necessary to satisfy the competence, autonomy and relationship with others, which is a complex challenge.

Furthermore, the practical example presented is also mistaken, since the escape room or *breakout* can be included within a *gamification* proposal to enrich it, but they are not considered *gamification* as such (Pérez-López, 2020). In fact, these are placed with iGMB (Game-Based Learning -Fotaris and Mastoras, 2019-), offering participants very intense and tension-filled experiences, since there is a time limit to decipher different puzzles and enigmas, and thus manage to escape from a room (escape room) or open a box (*breakout*).

Another practical example is shown in Figure 2, where there is also an error in the conceptualization of *gamification*. In fact, as expressed by Navarro-Mateos et al. (2021), in a systematic review on the state of *gamification* in the Spanish educational landscape, in several moments the term GBL and *gamification* are used interchangeably, which is a serious error. This occurs in the new example provided by AI, as it suggests adapting a game board similar to *Monopoly* to include questions related to subject content. In this case, what *ChatGPT* proposes is an example of a *serious game*, since it proposes the design of a game with specific educational purposes, incorporating content that facilitates the learning of relevant topics through the fun and dynamic approach that characterizes games (Pérez-López, 2020).

In this sense, it is important to mention that *ChatGPT* has been trained with a large volume of data from articles, books and online sources to answer the questions posed. Therefore, the problem lies in the reference sources, with special concern regarding the scientific literature given the great conceptual and terminological confusion that exists regarding *gamification* (Navarro-Mateos et al., 2021), conditioning the results reported by *ChatGPT* and, as a result, the concept that many teachers have about *gamification*. Hence the relevance of the filtering phase that must be done after any query (Deleon-Villagrán, 2023) to avoid the errors that AI itself, in this case *ChatGPT*, makes.

Figure 2. Example of activity presented by ChatGPT

5. Giant learning board

- Objective: to reinforce concepts in a fun and competitive way
- How it works:
 - A physical board (similar to games such as Monopoly or Snakes and Ladders) is designed with squares containing questions, challenges, or rewards.
 - Students advance by rolling a die and facing whatever the square indicates (solving a problem, performing a physical activity, etc.).
- Technological variation: to create an interactive digital board using tools such as PowerPoint or Google Slides.

3. A gamification based on Game of Thrones: AI vs. craftsmanship

As seen in the first section, one of the barriers that teachers report having when creating a *gamification* project is the creation of the narrative. In this sense, it helps a lot to have a ludic and narrative background, i.e., to have references from video games, board games and movies that can facilitate the fact of facing the blank page syndrome. This can be defined as the fear of having to start a project from scratch, being linked to creative processes (Villagrà-Arnedo et al., 2016). For example, if at the time of designing a *gamification* the teacher, depending on the interests of the students (and the suitability of the contents and competencies of the subject), considers it interesting to use a pirate-themed universe, it will be helpful to have as a reference the aesthetics and narrative of video games like Assassin's Creed IV: Black Flag, board games like Skull King or fictions such as Pirates of the Caribbean or Black Sails. In the absence of this type of references or experiences, *ChatGPT* can be a very useful tool when it comes to propose an initial narrative script that provides a structure from which to develop the educational proposal. However, the human filter will also be essential to detect possible errors, and to generate the necessary emotions to make the proposal credible and immersive, since the emotional aspect is one of *ChatGPT's* pending subjects, as will be shown below.

In this section, the AI will be tested to propose a *gamification* based on one of the most popular series of all times: *Game of Thrones*. In addition, each of the sections generated with the AI will be analyzed, complementing them with a «handmade» example carried out in a real way in university teaching. The expression «handcrafted» means that AI was not used in the design phase. But with the intention of «playing» on equal terms, the contextualization of the proposal is the same that was proposed to *ChatGPT*, i.e., the subject «Fundamentals of Physical Education», in physical activity and sport sciences.

The main objectives of this subject (which were also indicated to *ChatGPT*) are: to understand how to plan physical education at the secondary education level, taking into account the key elements of the curriculum; to develop the essential skills for effective teaching, responding to the needs of both the context and the students; and to internalize the importance of innovation as a way to improve the quality of education.

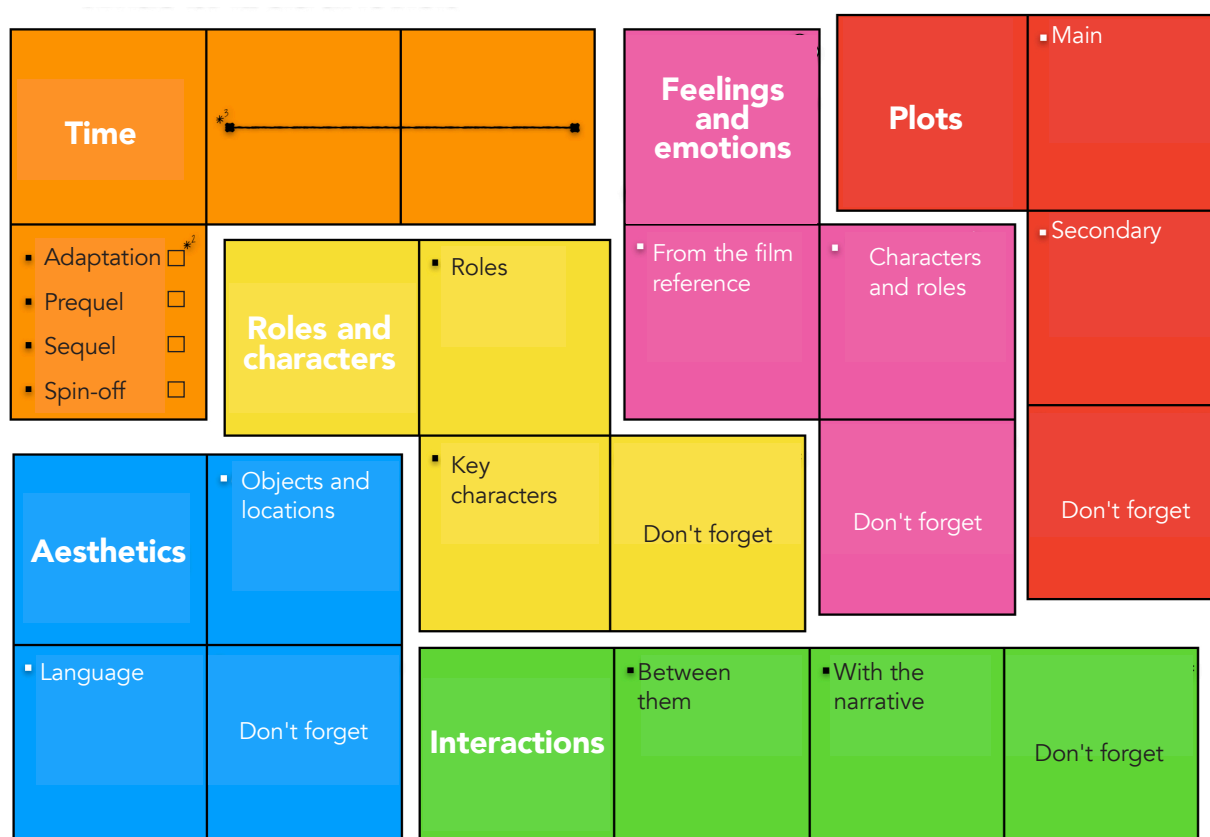
In addition, among the competencies to be developed are: organizational and planning skills, problem solving, decision making, critical awareness, autonomous learning, flexibility and adaptability to new situations, as well as the development of creativity and teamwork skills. Thus, in accordance with the objectives and competencies of the subject, it was decided to choose *Game of Thrones* as the narrative, since it would generate situations that would require great emotional management, which would provide the proposal with great educational value. To create

it, the key aspects established in the «Tetris of *gamification*» (Pérez-López and Navarro-Mateos, 2019) were taken into account: time, aesthetics, plots, roles and characters and interactions.

The concept of *gamification* (Pérez-López, 2018) refers to the adaptation of a filmic reference (television series or movie) to take advantage of the motivation of students to experience in first person what they have previously enjoyed as spectators. Figure 3 shows the elements to be taken

into account when implementing an educational proposal inspired by a fiction. At first glance, one can intuit the complexity of the event since there are elements and emotions that characterize it and that, therefore, must be part of the proposal, given that the students who know it and follow it expect to find it. Otherwise, credibility and immersion would be significantly reduced (Pérez-López and Navarro-Mateos, 2019).

Figure 3. *Gamification Tetris spreadsheet*

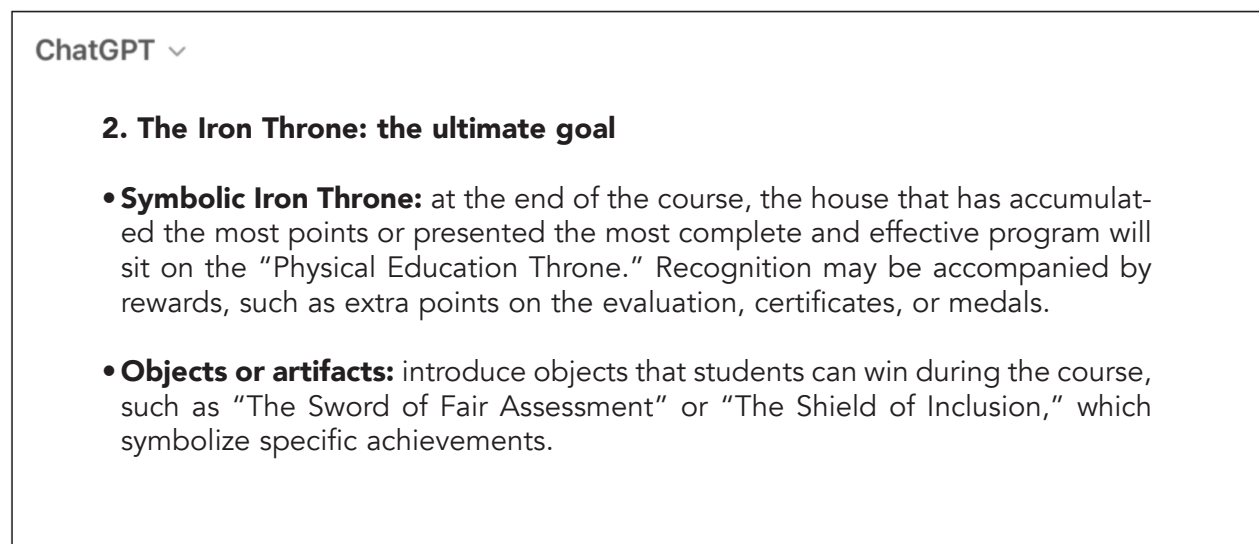


3.1 Objective and key emotions

When *ChatGPT* was asked how to make an adaptation of the TV series to the educational field (specifically to the subject “Fundamentals of Physical Education”, in Physical Activity and Sport Sciences), after a first section of contextualization of the series

(the plot of the series combines drama and medieval fantasy, including elements such as confrontations, betrayals and struggles to achieve the Iron Throne, and with it the power over the seven

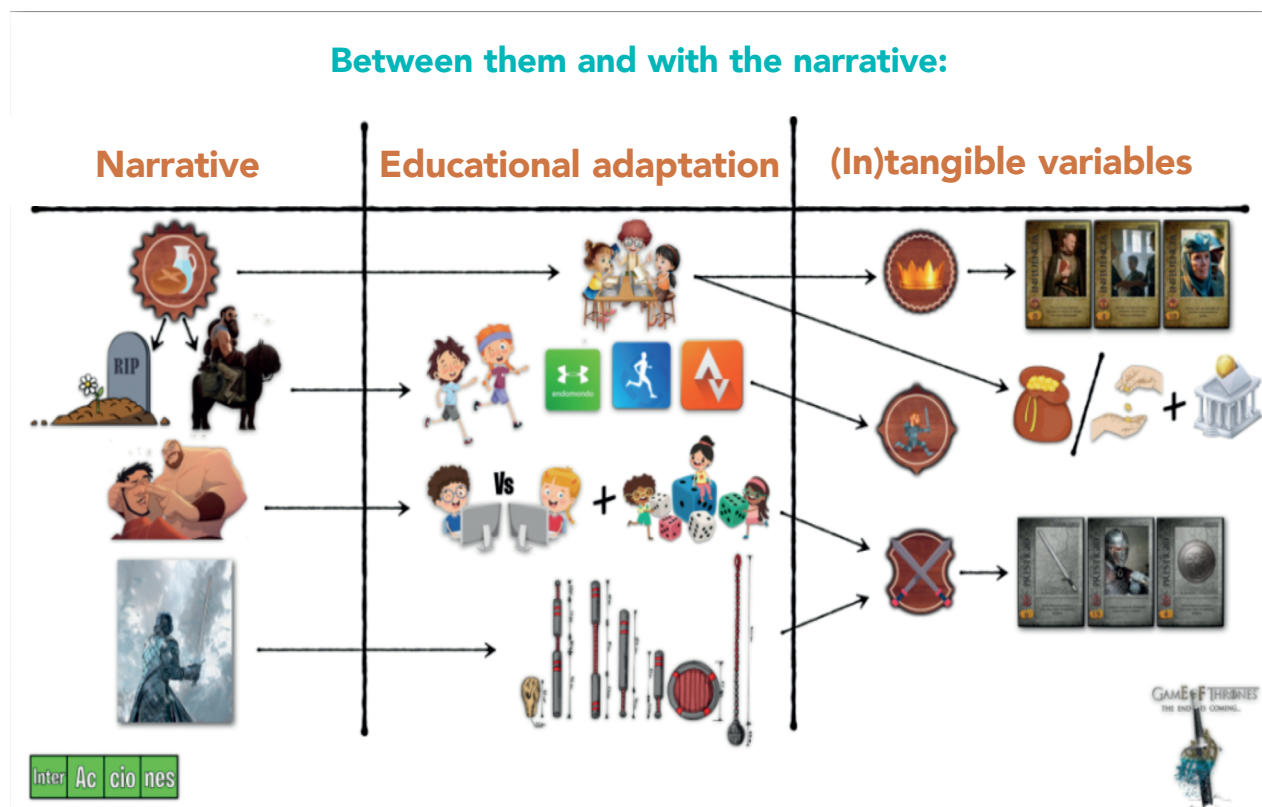
kingdoms of Westeros), it begins by presenting the final objective (Figure 4), which would correspond to the exciting purpose (the narrative).

Figure 4. Final goal and objects presented by the AI

First of all, it can be seen how there is no connection between what is required to achieve the Iron Throne in the series (allies, strategy, battle, resource gathering, planning capacity, etc.) and what is involved in achieving it in what *ChatGPT* proposes (delivering a didactic program). For the proposal to be credible, the emotions involved in achieving the Iron Throne (such as tension, pressure or loss of property) should be identified, and situations should be presented that generate these feelings in the students (Pérez-López and Navarro-Mateos, 2023a). Therefore, following Pérez-López (2020), the exciting purpose that was set for the students was: To become the King (Queen) of Westeros, conquering King's Landing. To do this, they did not have to get more points than other kingdoms (teams) or do a certain job, but, being

faithful to the series, they had to advance from their place of origin through the map of Westeros, defeating the rest of kingdoms, getting alliances with some of them and avoiding possible betrayals of their own lineage (team). Moreover, the means to achieve this was what connected the narrative with the formative, as will be described below.

The first thing to consider to adapt the fiction to the educational environment was to detect the fundamental actions of *Game of Thrones*: feeding (in order to survive and advance in the territory), training for battles, and fighting. After this, the fundamental key was to identify the emotions inherent to each verb, in order to make a faithful educational adaptation, and to link them to variables inherent to the narrative, such as gold or influence (Figure 5).

Figure 5. Relationships between narrative and their educational adaptation

Regarding the narrative, in the first place, there is the verb «to feed». In order to survive in Westeros, the different members of the Houses had to buy food (formative challenges), paying with gold coins. In this way they «fed» (nourishing themselves with the contents of the subject) and could have energy to travel to other kingdoms and battle. Travel to other territories was simulated in a real way, as each member of the House had to accumulate five days of running at a certain pace (recorded by means of the applications shown in Figure 5: Endomondo, Runtastic or Strava). In this way, sensations similar to those occurring in the original series were generated, as the students had to invest time and effort in commuting, also assuming possible setbacks.

They could also «train» in 1x1 situations or between groups. To recreate the sensations of a confrontation, board games were used that included mechanics linked to emotions such as tension or the feeling of responsibility (typical of a confrontation in the series). In addition, to review content related to the subject and to continue «training», confrontations were also included using different applications

and digital platforms such as, for example, Kahoot! or Quizizz.

Finally, we could not miss one of the most typical actions of *Game of Thrones*: the battles and struggles for power. To recreate the confrontations, *jugger*, a sporting activity that mixes elements of fencing and rugby, including foam weapons, was used. The official rules were used, maintaining the different roles and existing weapons. In this way, the emotions of the confrontations in *Game of Thrones* were recreated, relating it also with the area in which the subject was developed (Physical Education), given the great physical demand of the *jugger*.

In addition, these actions were linked to variables that appear in the series, such as gold, influence or prestige. Each House had a weekly allotment of coins (which varied depending on the characteristics of the territory, as in *Game of Thrones*) with which they could buy food, and there was also the possibility of asking the Iron Bank for a loan, whose «interest» was the completion of a training challenge. Depending on the valuation that the Houses had in the challenges related to the provisions, they

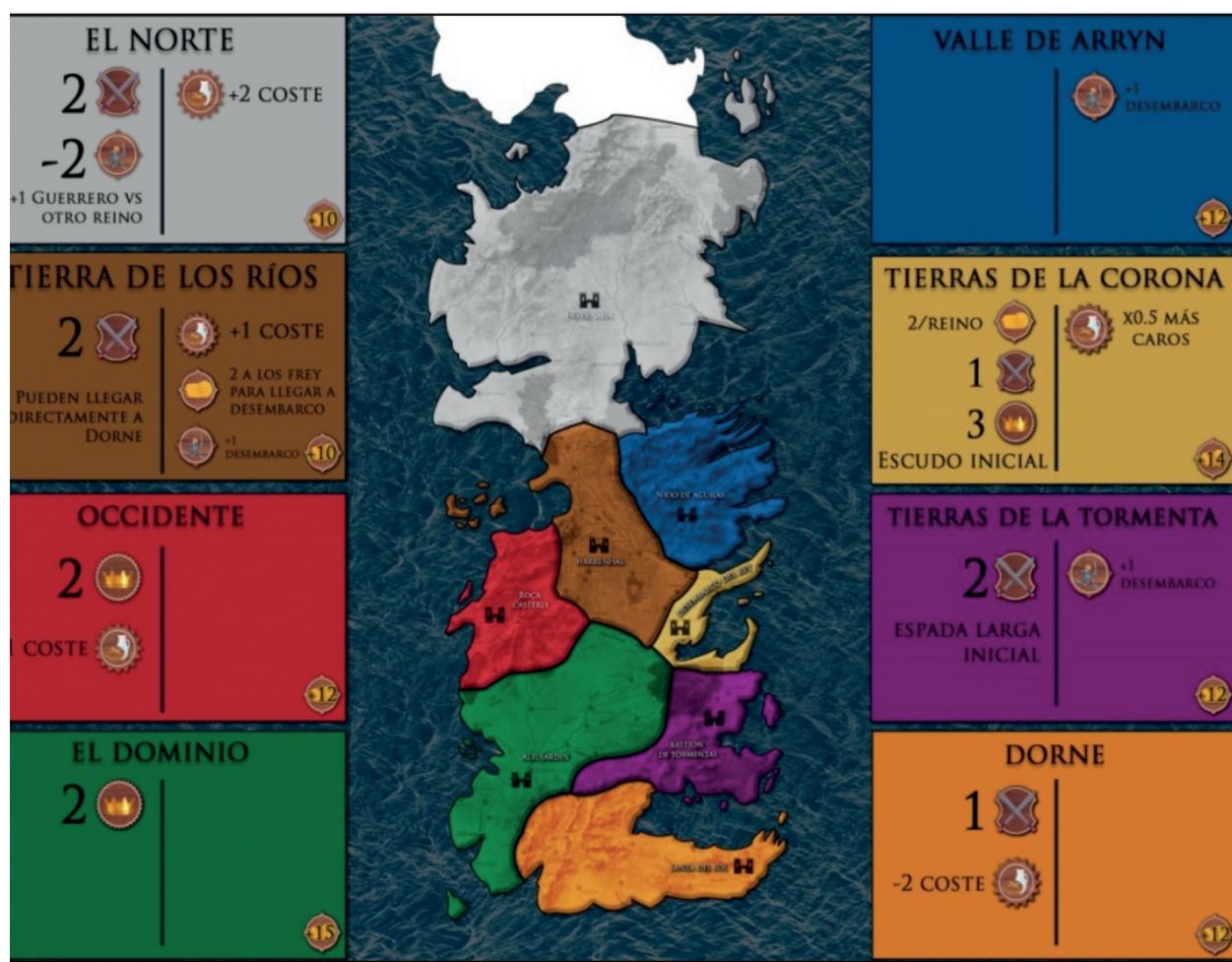
obtained influence cards (shown in gold in figure 5), which gave them privileges in the adventure (for example, preventing a member of the House from being sent to the Wall). Prestige was also included, materialized through cards (silver colored). This was achieved by winning battles and allowed access to special materials in the *jugger* competition.

In *Game of Thrones*, armies must make a physical advance (which requires time and effort), plan an attack strategy, expose themselves to the consequences of the battle (loss of resources) and, in case of losing the confrontation, return to their territory. This investment of time and effort is not comparable to the delivery of a challenge linked to one of the areas of the curriculum. On the other hand, the competition in *Game of Thrones* is not in any case friendly, so it would be necessary to go

to the root of the problem, and not to soften such a characteristic aspect of the series, but instead (in the case of considering that it does not fit the desired educational approach) choose another thematic universe. However, it is necessary to highlight the enormous educational value of generating a learning context with competition, since it generates behaviors and reflections with enormous transfer to real life (Navarro-Mateos et al., 2024b).

In the case of the *gamification* project, a territory map was created so that all the kingdoms knew both the location of the other Houses and the benefits and considerations of each one of them (Figure 6). In addition, we tried to make it aesthetically attractive and coherent with the kingdoms that appear in the series.

Figure 6. Map of Westeros and advantages and considerations of each kingdom



Another aspect to consider is that the objects proposed by ChatGPT have nothing to do with those that appear in the series (as would be the Valyrian steel sword, the dragonglass dagger or the banners of the Houses), nor with the values of the series, where there is continually a power struggle to improve the position of the different kingdoms with respect to the others, so it would make no sense to include artifacts related to fair assessment or inclusion. This does not mean that situations that give rise to reflection on fairness and inclusion cannot (and should) be generated, of course they can, but they should be included in a more natural and coherent way with the narrative.

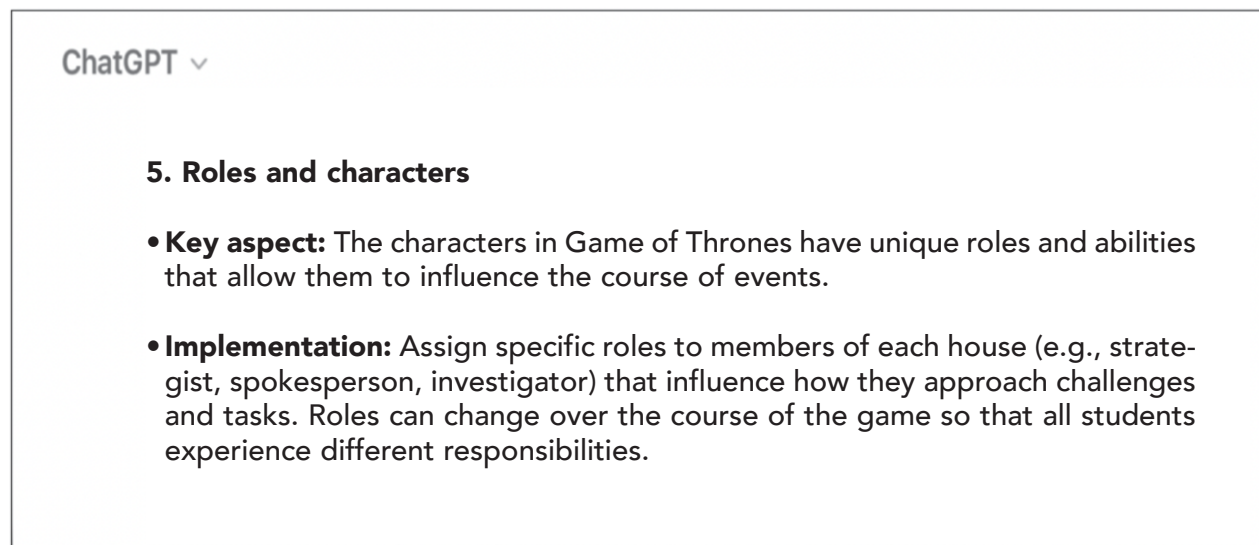
In the case of the «artisan» proposal, different objects were proposed that were coherent with the narrative (at an aesthetic level and at the level of internal logic with the plots), and that significantly increased the immersion and motivation of the stu-

dents. Coins were created using a 3D printer with the project logo, and territory, prestige and influence cards were made with characters and phrases from the series. The feedback after the delivery of a challenge was given through phrases from the series (the best evaluation being «I'm almost more flipped out than the Red Wedding episode» and the worst «The same value as Littlefinger's word»). In addition, in the series, the inhabitants of Westeros communicated through ravens, so a mail domain («cuervo@poniente.tv») was purchased so that students would receive a «raven» in their mail when communicating with Maester Valyr (the teacher's alter ego in the project).

3.2 Roles and characters

Regarding roles and characters, *ChatGPT* points out as a key aspect the information shown in Figure 7.

Figure 7. Roles proposal presented by *ChatGPT*



The AI is quite right when it says that the roles and skills of the characters influence the course of events. Now, the roles that appear in *Game of Thrones* are directly related to status as, for example, King of Westeros or Lord Commander. However, the roles posed by the AI have absolutely nothing to do with the narrative, but rather with those granted in active methodologies such as cooperative learning. Moreover, in the series there are no role changes without justification, one can progress and climb (for example, if one is a member of the Night's Watch,

one can become Lord Commander of the Night's Watch), but not leave aside the origin and context.

The proposal carried out in a real way included the main roles of the series: King/Queen of Westeros, Hand of the King/Queen, Lineage or Kingsguard, Lords/Ladies of the Houses, Lord Commander, Lineage, Lord Commander of the Night's Watch, member of the Night's Watch. After a first session in which the Houses were formed (where chance played a great role, as it happens in real life, and in the series itself, since nobody is born

enormous value, since they are linked to experiential and emotional aspects that are key to significant learning, and thus have an impact on real life. This is where the role of the teacher is fundamental, having the opportunity to generate meaningful and exciting learning contexts that meet the needs and characteristics of the students.

4. Conclusions

The use of artificial intelligence tools such as *ChatGPT* to design educational gamification proposals represents a resource with great potential, especially for teachers who feel they lack experience and creativity. AI can provide a first general story structure to help overcome initial blocks and facilitate the generation of ideas, which is especially useful in the face of the so-called «blank page syndrome». However, this article has shown that AI cannot be relied upon exclusively to create gamification experiences that are truly coherent and have a formative and personal impact on learners. Teachers must intervene in a «handcrafted» way to adjust, personalize and contextualize AI-generated proposals, including the emotions needed to maintain the motivation and engagement of different learner profiles.

One of the main shortcomings detected in the proposals generated by *ChatGPT* is the terminological and conceptual confusion, reflecting the existing scientific literature. Examples such as an «escape room» or the adaptation of «Monopoly» show the use of game-based learning and gamification as synonyms. On the other hand, it is a mistake to relate gamification to a specific activity, instead of understanding it as an ambitious and complex approach. Likewise, the comparative analysis between the AI-generated proposal and a real gamification experience based on Game of Thrones has clearly illustrated the substantial differences between an AI-generated narrative and a handcrafted one. While the *ChatGPT* proposal lacks coherence, emotional depth and narrative fidelity, the real proposal incorporates attention to detail, the series' own roles and characteristic objects, thus achieving an immersive and credible experience.

In short, the true richness of gamification does not lie in the use of game mechanics and elements, but in its ability to generate a learning environment where students feel protagonist, involved and emo-

tionally connected with the experience. This is where the role of the teacher becomes meaningful: designing meaningful contexts that transcend the classroom, that awaken emotions and leave a mark on the different student profiles. *ChatGPT* can be a useful tool to break down some barriers in gamification, but human direction and supervision are essential to ensure an enriching and memorable educational experience.

Author contributions

Isaac J. Pérez-López: conceptualization, research, software, supervision, writing (review and editing).

Carmen Navarro-Mateos: research, visualization, writing (original draft).

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