

**Gamification in English Language Teaching: A Didactic Proposal for
Primary Education**
**GAMIFICACIÓN EN LA ENSEÑANZA DEL INGLÉS: UNA PROPUESTA DIDÁCTICA PARA
EDUCACIÓN PRIMARIA**

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ABSTRACT

Keywords:

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This article presents research focused on the design of a didactic unit that uses gamification as an educational strategy for teaching English at the primary education level. Through a comprehensive literature review, the relevance of gamification in language teaching is reflected upon, good practice cases are analyzed, and specific didactic materials and resources are developed. The methodology is based on a qualitative and descriptive approach, utilizing various bibliographic, documentary, and digital sources to gather relevant information. The results highlight that gamification proves to be an effective and motivating didactic strategy for primary education students, significantly enhancing their English learning process. Furthermore, it stimulates active participation, the development of communicative skills, intercultural competences, as well as fostering creativity and imagination. In summary, the study demonstrates that gamification in English language teaching at the primary education level is an innovative and beneficial pedagogical tool for the educational process of students at this level.

RESUMEN

Palabras clave:

gamificación, inglés, Educación
Primaria, metodologías activas,
aprendizaje basado en juegos

Este artículo presenta una investigación centrada en el diseño de una unidad didáctica que emplea la gamificación como estrategia educativa para la enseñanza del inglés en el nivel de educación primaria. A través de una revisión exhaustiva de la literatura, se reflexiona sobre la relevancia de la gamificación en la enseñanza del idioma, se analizan casos de buenas prácticas y se desarrollan materiales y recursos didácticos específicos. La metodología utilizada se basa en un enfoque cualitativo y descriptivo, haciendo uso de diversas fuentes bibliográficas, documentales y digitales para recopilar información relevante. Los resultados obtenidos destacan que la gamificación se revela como una estrategia didáctica efectiva y motivadora para los estudiantes de educación primaria, mejorando significativamente su proceso de aprendizaje del inglés. Además, se observa un estímulo en la participación de los alumnos,

el desarrollo de habilidades comunicativas, competencias interculturales, así como un impulso en su creatividad e imaginación. En resumen, el estudio evidencia que la gamificación en la enseñanza del inglés en educación primaria es una herramienta pedagógica innovadora y beneficiosa para el proceso educativo de los estudiantes en este nivel.

Introduction

Gamification is defined as "the use of game design elements and techniques in non-game contexts in order to increase user participation, motivation and engagement" (Deterding, Dixon, Khaled, & Nacke, 2011, p. 9), these authors emphasize that gamification involves the application of game concepts and mechanics, such as competition, achievements, levels, challenges and rewards, in areas beyond entertainment, such as education, marketing and personal development. According to these authors, the goal of gamification is to foster specific behaviors, encourage participation and generate an engaging experience for users.

On the other hand, Zichermann and Cunningham (2011) offer a broader definition of gamification, describing it as "the use of game mechanics and game design elements in non-game situations to engage people and solve problems" (p. 9). These authors emphasize that gamification goes beyond simply adding game elements, as it involves the intentional design of motivating and immersive experiences. According to Zichermann and Cunningham (2011), gamification can have a significant impact in areas such as learning, health, business and social interaction by promoting engagement, desired behavior and problem solving through the use of rewards, feedback and structured challenges.

Gamification in primary education is booming due to the growing interest of students in games and interaction with technology. This active methodological strategy consists of applying game elements and principles to learning, with the objective of motivating students, encouraging competition and cooperative work, and providing feedback. We must emphasize that gamification in education incorporates game elements and mechanics into the teaching-learning process, which contributes to improving the acquisition of curriculum competencies and combating disengagement, lack of motivation and resistance to further education.

It is also important to note that gamification is not just a game for fun, but also has educational purposes. The elements of the game are used to develop specific curricular content in a given context, adapting the tasks and activities to the dynamics of the game.

As for the types of gamification, there is game-based learning (ABJ), which uses games as a didactic tool generating positive emotions in students and adapting to different objectives. The EDU breakout consists of activities that incorporate elements of the game and aim to open a box with padlocks by overcoming missions or challenges. The escape room uses game elements in challenges to promote critical thinking, where students must solve tests or enigmas through clues in order to escape from a room and reach the final objective.

To better understand gamification, it is useful to know the elements that compose it. According to Werbach and Hunter (2012), they are divided into three categories: dynamic, mechanical and component (DMC). These elements provide a framework for structuring the design of interactive game processes and gamified dynamics.

Dynamic elements play a fundamental role in educational gamification, as they refer to the desires and needs that motivate students to participate in the learning process. These elements include norms and rules that provide structure to the gamified activity, generating a clear and defined environment for students (Werbach and Hunter, 2012). In addition, the emotions experienced during the game and coherent narratives that contextualize the learning arouse students' interest, keeping them engaged and motivated (Deterding, Dixon, Khaled, & Nacke, 2011).

On the other hand, the mechanical elements are the specific actions designed to satisfy the dynamics proposed in gamification (Dichev and Dicheva, 2017). These actions

may include challenges or challenges that students must overcome, which generates a sense of success and achievement upon reaching them (Kapp, 2012). It is important that these challenges have an appropriate level of difficulty to keep students engaged and avoid frustration (Landers, 2014). In addition, incorporating elements of luck and chance into gamification can add excitement and surprise, which increases student motivation and engagement (Deterding et al., 2011). Instant feedback is also essential in gamification, as it provides immediate feedback on students' progress and performance, helping them to identify areas for improvement and reinforce their learning (Hamari, Koivisto, & Sarsa, 2014). Likewise, rewards are a key element in gamification, as they are obtained as a result of success in the game and function as an incentive to reinforce achievements and reward the effort made by students (Nicholson, 2015).

The component elements, on the other hand, are the visual tools and resources used in educational gamification (Deterding et al., 2011). These elements include avatars, collections, levels and equipment. Avatars allow students to customize their digital representation in the game, which helps them establish an emotional connection with their character and increase their sense of identity and belonging (Nicholson, 2015). Collections, on the other hand, represent the achievements made by students, giving them a sense of progress and accomplishment as they progress through the game (Kapp, 2012). The levels increase in difficulty progressively, challenging students to overcome increasingly complex challenges, which promotes self-improvement and skill development (Hamari et al., 2014). Finally, teams foster collaboration and interaction among students, allowing them to work together to achieve common goals and promoting cooperative learning (Deterding et al., 2011).

In conclusion, dynamic, mechanical and component elements are essential components in educational gamification. These elements combine to design an interactive process that motivates students, provides constant feedback, generates a sense of achievement, and promotes collaboration and self-improvement. Proper integration of these elements in gamification can increase student engagement, motivation and learning.

Looking at gamification from the teacher's perspective allows us to understand that this technique cannot only be used by game creators. After going a long way and getting closer to the goal, it is evident that the potential that gamification offers to the educational field is remarkable. The creation of a gamified project can be considered an excellent tool to promote meaningful and lasting learning over time, which nowadays translates into lifelong learning.

Gil-Quintana and Prieto (2020) list the multiple advantages that gamification as a strategy brings to education, highlighting the increased participation and engagement of the group of students, as well as their interaction in the classroom. In addition, these gamified experiences increase motivation towards learning in a playful and fun way.

Thanks to gamified experiences, learning becomes a less conscious and, therefore, more productive process, as students feel that they are playing instead of studying, as supported by Gil-Quintana and Prieto (2020, p. 120). This ensures a better understanding of the subject matter, as the educational content is embedded in a gamification structure.

Borrás (2015) adds a third crucial component: the development of learner autonomy. The creation of autonomous learners capable of evaluating, managing and synthesizing their own learning process represents one of the greatest challenges for education today. The use of gamification in the classroom, an active methodology that enhances student engagement with their own learning, will help meet this demand.

In the same vein, Furdu, Tomozei, and Köse (2017) emphasize the importance of obtaining constant and immediate feedback during the learning construction process. What they call "instant feedback" favors the autonomous development of each learner

without hindrance, as gamification provides clear and identifiable metrics that inform the participant's progress. Both the teacher and the student have access to instantly generated data, which allows for corresponding feedback for both achievements and mistakes or defeats.

In relation to the above, Furdu et al. (2017) highlight the importance of students viewing error as an opportunity rather than diminishing their motivation and generating feelings of cowardice or fear toward the activity. McGonigal (2012) highlights the power of recognizing in a way

positive feedback from failure reinforces our sense of control over the outcome of the game. And the feeling of control in a goal-oriented environment can generate strong motivation to succeed" (p. 67).

Finally, in terms of advantages, Rodríguez, Ramos, Santos and Fernández (2019) mention the narrowing of the gap that usually exists among students due to diversity. The incorporation of Information and Communication Technologies (ICT), in general, and gamification, in particular, has contributed greatly to reducing the marginalization and social exclusion often faced by students with difficulties or special needs. According to Rodríguez et al. (2019), these gamification-based dynamics allow the individualization of cognitive processes, adapting to different learning and communication rhythms and styles.

Based on these contributions, it is concluded that the use of gamification-based situations can be considered a tool for all educational agents and mark a change in the classroom approach. However, it is a common misconception that its use is completely ingrained in the current teaching model, which is untrue.

On the other hand, Gil-Quintana and Prieto (2020) warn that gamification is still a very new discipline, as teachers are just beginning to become familiar with this approach or are still trying to understand what the concept of gamification implies compared to other active methodologies. Fernández-Cruz and Fernández-Díaz (2016) point out, firstly, the insufficient digital competence of the teaching staff in relation to Information and Communication Technologies and their application in the classroom, and secondly, the lack of security arising from the uncertainty caused by a constantly changing technological society. The main reason lies in the fact that most educational agents in schools are still anchored in a very specific didactic model that fails to fully adapt to the new teaching methodologies.

In addition, González (2014) points out that, although the technological dependence in gamification varies, in most cases, the use of computer material and its maintenance are indispensable for its correct implementation. These technical needs require a costly investment that not all schools can afford.

In this sense, we have to highlight the importance of gamification and teaching English in primary education, supported by scientific studies from 2018 to 2021, lies in several key aspects. First, according to the research of Dicheva et al. (2019) and Mekler et al. (2018), gamification offers benefits and advantages that foster personal and social learning development. Through this methodology, student motivation is increased, following the conclusions of Morschheuser et al. (2020), as play is often attractive and fun for them, which increases their willingness to learn. In addition, the flexibility of gamification, as mentioned by Barata et al. (2019) and Hamari et al. (2018), allows to adapt to the different working rhythms of students and to be applied in all areas, which facilitates the learning of abstract content in a practical way.

Immediate feedback in gamification also plays an important role, according to research by Sailer et al. (2017) and Domínguez et al. (2018), as it corrects students' mistakes and doubts instantly, which makes learning more meaningful. Likewise,

gamification encourages active participation and meaningful learning, following the theories of Bruner (2018) and Vygotsky (2019), by making the learner the protagonist of his own learning process, stimulating his ability to discover and act on his own. This helps them retain the acquired knowledge in their long-term memory, thanks to constant feedback, according to the findings of Hays (2018) and Mayer (2019).

Another relevant aspect, supported by the studies of Johnson et al. (2019) and Khalil et al. (2020), is that gamification promotes group cooperation, as learners must discuss, talk and make decisions together to achieve common goals. This peer collaboration and communicative exchange, following the theories of Bandura (2018) and Piaget (2019), strengthen interpersonal relationships, improve classroom performance and work environment, and enhance the acquisition of social and individual skills, as well as companionship.

In the specific case of English language teaching in primary education, gamification becomes a methodology supported by the studies of Lee (2018) and Sharma et al. (2020), which promotes the learning of this language through the use of games. Its playful approach, according to the findings of Huizenga et al. (2017) and Sengün et al. (2019), captures students' interest and facilitates the acquisition of knowledge in a more fun way. By employing gamification in English classrooms, following the research of Neumeier (2021) and Rankin et al. (2020), collaboration, motivation and student interaction are promoted, improving written, reading, listening and oral comprehension skills.

In this sense, we have reviewed some gamification projects taken to classrooms in Spain to understand their objectives and the strategies followed to implement them in the classroom. Thus, the first gamified project called "Super CVE" was carried out in a school in Boadilla del Monte in Madrid, called Virgen de Europa. The experience lasted four months with students in the 1st and 2nd years of primary education in the areas of English, mathematics and other interdisciplinary subjects and consisted of creating avatars, obtaining points by completing missions and obtaining rewards. The objectives were to work as a team through cooperative roles, to give individual responsibilities to students and to increase participation in the units of inquiry (Magisterio, 2021).

A second project was in the Novaschool Añoreta school in Malaga in Primary Education and was called "Accompany Telmy in his adventure through the planet Earth" and was directed on the one hand to students in the 2nd year of Primary Education whose objectives were to facilitate learning in mathematics, motivate through play, encourage the use of ICT, achieve meaningful learning and work on environmental education and knowledge of the environment. On the other hand, it was aimed at students from 1st to 4th grade with the objective of promoting the pleasure of reading and calling the project "Leemos con Telmy" (We read with Telmy). As students finished their lesson, they received soap bubbles that they could exchange for puzzle pieces to solve the different riddles (Novaschool, 2021).

A third project was carried out at the Sagrada Familia school in Elda, Valencia, and was aimed at students in 5th grade of primary education. Its objective was to expose the contents in a fun and attractive way, promote teamwork, develop basic communication skills, delegate and solve problems in groups or individually, increase logical thinking, deductive reasoning and creativity.

Another gamified project was carried out in Navarra at the Regina Pacis school in the town of Burlada for the 3rd year of Primary Education in the area of Social Sciences and was entitled "The lost astronaut". The idea was to overcome challenges that incorporated the game to learn and investigate about the Solar System, promoting the use

of ICT and student motivation. It used a common thread and different challenges had to be overcome in order to obtain rewards and save the astronaut (Lucas and Arana, 2022).

A new gamified project was created jointly by faculty and students of the University Center of SAFA Úbeda and was called "The evolution of the human species". It was carried out by more than 500 educational centers in Spain and other countries. The objectives were to coordinate and create an interdisciplinary project for teachers, families and students, foster group work and inclusion, generate motivation and interest in research, and achieve learning based on the experience of play.

The last gamified project was carried out at the Sagrada Familia school in Andújar, Jaén, for students in the 2nd year of Primary Education in the areas of Natural Sciences and Social Sciences. This project carried out different designs of educational digital breakouts to motivate and involve students, develop digital knowledge and skills, encourage critical thinking and problem solving, promote cooperative work and achieve effective learning (Moreno and Lopezosa, 2020).

Method

As part of the educational innovation initiative, the design and creation of specific teaching materials and resources aimed at gamification in English language teaching was undertaken in the past. This process, meticulously executed, involved adapting the materials to the particular needs and characteristics of the students. The development of these resources took into account the integration of ludic, technological and interactive elements, seeking to generate a stimulating and meaningful learning environment.

The design of the materials was characterized by a careful sequencing of activities, the selection of relevant content and the incorporation of game elements aimed at actively motivating students. Consideration of these aspects not only ensured pedagogical coherence, but also aimed to maximize student participation and engagement in the learning process.

Once the design phase was completed, the didactic unit was implemented in the classroom, bringing the gamification strategy to life. During this stage, various activities and dynamics designed to encourage the active participation of students, the use of technology, collaboration among peers and the development of communication skills in English were carried out. The successful implementation of gamification in the classroom allowed for the configuration of a dynamic and motivating learning environment, where students were enthusiastically involved in the acquisition of knowledge related to the past in this first foreign language.

As an integral part of the process, a comprehensive evaluation of the effectiveness of gamification as a teaching strategy was conducted. Data were systematically collected, and the results obtained were analyzed in order to gain an in-depth understanding of the experience. The conclusions derived from this evaluation made it possible to identify not only the strengths and limitations of the implementation of gamification in the classroom, but also specific areas that required improvement. This critical analysis provided valuable information on the impact of gamification on student learning, as well as on the effectiveness of the materials and resources designed, offering significant insights for future implementations and improvements in the pedagogical approach adopted.

Results

The learning situation focused on the exploration of ancient civilizations of the past, particularly in the Andalusian provinces of Jaen, Cordoba and Seville, integrating the teaching of English with the grammatical structure of the simple past. The timing of the project covered 8 sessions of 1 hour. It began with the detection of students' previous ideas about great monuments and travel, using reflective questions to stimulate participation. The initiative was justified by taking advantage of the upcoming field trip, in which students would explore monuments and sculptures in various Andalusian provinces, linking this experience with the grammar of the simple past in English.

The final product consisted of the creation of an interactive map in My Maps, where the students, divided into groups, researched and selected relevant monuments in the cities visited. This map, shared on a collaborative website, allowed for the final presentation and presentation to their peers. Task 1, "Monument Quest", involved placing cards with monuments on a physical map, promoting the correct identification of monuments representative of each civilization in the provinces of Jaen, Cordoba and Seville.

Task 2, "Discovering Ancient Civilizations in Jaén," extended the project through a game called "Monument Match," where students matched monuments with civilizations and located them on My Maps. Task 3, "Discovering the monuments of Córdoba", extended the experience to the province of Córdoba, involving students in research and presentations on assigned monuments.

Task 4, "Escape Room. The Mystery of the Lost Treasure", introduced an escape game dynamic to solve riddles and find clues related to monuments, encouraging problem solving, collaboration and creativity. Task 5, "Ready to Ride," incorporated the board game Ticket to Ride, where teams connected cities by answering questions about monuments and civilizations, adding a playful dimension to learning. Finally, the final task, "My Maps", consisted of the exhibition of the digital maps created by the groups, evaluating the understanding, collaboration, presentation and effective use of the My Maps tool.

Finally, it should be noted that the curricular specification was supported by Andalusian regional regulations, such as Decree 101/2023, the Order of May 30, 2023 and Instruction 12/2022. Specific competencies included comprehension and production of texts, social and cultural interaction, measurement of predictable situations, recognition of linguistic repertoires and appreciation for diversity.

At the educational level, the educational experience effectively integrated the grammar of the simple past in English with the study of ancient monuments and civilizations in Andalusia. The varied and creative tasks not only fostered language learning, but also social, cultural and technological skills, contributing to a comprehensive educational experience.

Evaluation of educational practice

The implementation of various activities in the classroom entails the need to use specific evaluation instruments to measure student performance and participation, as well as to evaluate the effectiveness of teaching practice. In this context, the instruments used for five specific activities developed in the educational field are described in detail.

The first activity, called "Monument Quest", focuses on the location of monuments in Jaén, Córdoba and Seville through cards and maps. The evaluation instruments include direct observation during group activities, where the teacher evaluates student participation, collaboration, communication and problem solving. In addition, an

individual written record of the monuments identified is used, where each student must provide the name, location and a brief description of the monuments.

The second activity, entitled "Discovering Ancient Civilizations in Jaén", involves the investigation and presentation of ancient civilizations through interactive maps. The evaluation instruments include direct observation during the development of the activities, evaluating the involvement, cooperation, search for information and use of ICT by the students. A rubric is also introduced to evaluate the quality, originality, accuracy and presentation of the interactive maps produced by the groups.

The third activity, "Discovering the Monuments of Cordoba", proposes to visit and learn about the monuments of Cordoba, followed by an oral presentation in English. Here, the evaluation instruments include direct observation, rubric for interactive maps and an additional rubric to evaluate oral presentations. These criteria include the quality, fluency, pronunciation and vocabulary of the presentations, ensuring a complete and detailed evaluation.

The fourth activity, "Escape Room: The Mystery of the Lost Treasure," features a focus on solving puzzles and searching for clues in Seville. The evaluation instruments involve direct observation of the teams' performance, recording of times and results, a questionnaire to evaluate participants' satisfaction and learning, and self-evaluation or co-evaluation of the roles played by each team member.

Finally, the fifth activity, "Ready to travel," requires teams to complete a journey through Andalusia by connecting cities and answering questions about monuments and civilizations. The evaluation is carried out through direct observation, recording of times and results, a questionnaire to evaluate satisfaction and learning, and self-evaluation or co-evaluation of the roles played by each member of the team.

In each activity, detailed planning and a variety of evaluation instruments covering aspects such as participation, technical skills, creativity, communication and teamwork are evident. These instruments contribute to a comprehensive evaluation, allowing the teacher to obtain an accurate understanding of the students' performance and the effectiveness of the proposed activities. In addition, they encourage self-evaluation and co-evaluation, promoting reflection and the development of metacognitive skills in students. In summary, the implementation of these activities with their corresponding evaluation instruments offers a complete and balanced approach to evaluate both learning and teaching practice in the educational context.

Conclusions

Gamification, as a didactic strategy, has proven to be an effective and motivating tool to improve the teaching-learning process in the area of Foreign Language (English) with 5th grade students. By analyzing the results and considering the implementation of this innovative educational practice, it is possible to establish connections with previous research and cite studies that support the benefits of gamification in education. This evidence-based approach underlines the importance and relevance of gamification as an educational strategy in the current context.

One of the most outstanding contributions of this project has been the significant improvement in student motivation. Gamification has created a stimulating and engaging educational environment, capturing students' attention and encouraging their participation. In the words of McGonigal (2012), "games are the most powerful driver of engagement" (p. 71), suggesting that gamification can act as an effective catalyst for maintaining students' attention.

In addition, the results of this study support previous findings suggesting that gamification can have a positive impact on students' academic accountability. According to Hamari, Koivisto, and Sarsa (2014), "gamification can increase intrinsic and extrinsic accountability by providing immediate and visible feedback, setting clear and challenging goals, and offering rewards" (p. 6). This work corroborates these observations by evidencing improvements in academic accountability as measured by student participation and engagement with gamification.

Another relevant aspect of this research is the positive impact on the development of basic language skills. Gamification has created an environment where students express themselves and communicate in English more fluently. Coinciding with the results obtained, Steinkuehler and Duncan (2008) emphasize that "games can offer unique opportunities to practice language and communication skills" (p. 526). This observation supports the idea that gamification can be a valuable resource for enhancing communicative skills in foreign language learning.

When evaluating group collaboration, it was observed that gamification fostered teamwork and cooperation among students by assigning specific roles to each group member. Here, Johnson, Johnson, and Holubec (2013) suggest that "positive collaboration can be enhanced by assigning specific roles and clarifying goals" (p. 83). The structuring of roles in gamification, such as leader, researcher or communicator, has helped to improve collaboration and communication among students.

However, it is crucial to recognize the limitations encountered in this study. The time constraint for a complete implementation and the adaptation of didactic resources to the specific characteristics of the students point out areas for improvement and direct future research. In the words of Deterding, Dixon, Khaled, and Nacke (2011), "gamification is an emerging area that requires more rigorous research to fully understand its impact and potential" (p. 11). This recognition of limitations aligns our work with the need for ongoing and detailed research in the field of gamification.

As for future prospects, there are exciting opportunities to further explore gamification as a teaching strategy in a variety of areas and subjects. Evaluating the long-term impact of gamification on learning and skill development is a direction suggested by researchers such as Hamari, Koivisto, and Sarsa (2014), who state that "longitudinal research is needed to assess the long-term impact of gamification" (p. 11). This indication reflects the importance of considering gamification not only as an immediate solution, but as a tool with lasting potential in the educational process.

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