LITERACY DEVELOPMENT THROUGH GAME-BASED LEARNING AND GAMIFICATION IN EFL IN PRIMARY EDUCATION: A COMPARATIVE STUDY

DESARROLLO DE LA ALFABETIZACIÓN A TRAVÉS DEL APRENDIZAJE BASADO EN JUEGOS Y LA GAMIFICACIÓN EN LA CLASE DE INGLÉS COMO LENGUA EXTRANJERA EN EDUCACIÓN PRIMARIA: UN ESTUDIO COMPARATIVO

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Abstract

This paper explores the integration of games into foreign language teaching through Game-Based Learning (GBL) and Gamification within the English as a Foreign Language (EFL) classroom at a public Primary School in Valencia, Spain. The study analyses the benefits of these approaches, emphasizing their unique contributions to language learning. To this end, both methodologies were implemented separately in two parallel classrooms using the same curricular contents and following the tenets of the Pedagogy of Multiliteracies (New London group, 1996). The primary objective was to foster students' literacy development and empower them as meaning-makers in a second language through engaging game-based activities. Employing a qualitative approach, the study observed significant positive impacts on literacy development across conceptual, personal, sociocultural and aesthetic dimensions. A complementary quantitative analysis revealed a marked increase in student motivation, with most participants expressing high levels of excitement and satisfaction averages in both classes. The findings suggest that GBL and Gamification not only enhance student motivation and engagement in EFL but also promote cooperative learning through group activities. However, the results caution that these methodologies should not be seen as standalone solutions for effective teaching

and learning. Rather than being opposing strategies, GBL and Gamification are complementary, each serving distinct purposes that can be harmoniously integrated within the classroom. Consequently, educators are encouraged to integrate both methodologies concurrently to optimize language learning outcomes.

Resumen

Este artículo explora la integración de los juegos en la enseñanza de lenguas extranjeras mediante el Aprendizaje Basado en Juegos (ABJ) y la Gamificación en el aula de Inglés como Lengua Extranjera (ILE) en una escuela primaria pública de Valencia, España. El estudio analiza los beneficios de estos enfoques, destacando sus contribuciones únicas al aprendizaje de idiomas. Con este fin, ambas metodologías se implementaron por separado en dos aulas paralelas utilizando los mismos contenidos curriculares y siguiendo los principios de la Pedagogía de las Multiliteracidades (New London Group, 1996). El objetivo principal fue fomentar el desarrollo de la literacidad en los estudiantes y capacitarlos como creadores de significado en una segunda lengua a través de actividades basadas en juegos. Empleando un enfoque cualitativo, el estudio observó impactos positivos significativos en el desarrollo de la alfabetización en dimensiones conceptuales, personales, socioculturales y estéticas. Un análisis cuantitativo complementario reveló un aumento notable en la motivación estudiantil, con la mayoría de los participantes expresando altos niveles de entusiasmo y satisfacción en ambas clases. Los hallazgos sugieren que el GBL y la Gamificación no solo mejoran la motivación y el compromiso de los estudiantes en ILE, sino que también promueven el aprendizaje cooperativo a través de actividades grupales. Sin embargo, los resultados advierten que estas metodologías no deben considerarse soluciones únicas para una enseñanza y aprendizaje efectivos. En lugar de ser estrategias opuestas, el ABJ y la Gamificación son complementarias, cada una con propósitos distintos que, al combinarse, optimizan los resultados de aprendizaje de idiomas. En consecuencia, se anima a los educadores a integrar ambas metodologías simultáneamente para maximizar el impacto educativo en el aula de lenguas.

1. INTRODUCTION

In the ever-evolving field of foreign language education, teachers are constantly looking for innovative approaches to engage and motivate students, especially in the area of EFL instruction at the primary level. As traditional teaching methods come under debate for their ability to engage the attention of digital-native learners, the integration of games, particularly Game-Based Learning (GBL) and Gamification, emerges as a promising avenue (Mercan and Varol, 2024). This article delves into the transformative potential of GBL and Gamification in the context of primary EFL education, with the aim of shedding light on their benefits, challenges and implications for language teaching and learning.

Games make language learning more practical and engaging. Not only do they trigger active learning and are student-centred oriented, but also allow learners to interact in particular social contexts, work collaboratively, make mistakes and construct knowledge (Reyes-Torres and Portalés, 2020). Playing games thus provides students with the opportunity of experiencing language in a memorable way (Schank et al., 1999). Varol, Mercan and Köseğlu (2024) claim that these methodologies come under the broader category of active and multimodal learning, a progressive educational trend that gives priority to students' participation.

In line with these active learning principles, preparing students for active participation in today's multimodal societies also requires guiding their learning towards an expanded understanding of language, imagery, culture, and literature (Kern, 2000). As Paesani, Allen, and Dupuy (2016) emphasize, the Pedagogy of Multiliteracies offers a relevant framework for achieving this, as it encourages students to navigate and interpret various forms of communication beyond text alone. Reyes-Torres and Portalés (2020) argue that reflective practices and multimodal strategies not only enable young learners to use foreign languages for communication but also empower them to critically analyze and discuss multimodal resources, thereby cultivating a deeper, more comprehensive literacy.

This article presents a research study in which GBL and Gamification were separately implemented to examine their specific contributions to language learning. The main objective was to study whether games in the classroom can meet the objectives and competences required for learning a foreign language in the 21st century. For this purpose, two educational interventions were designed based on the same curricular content of the English class for 3rd graders in Primary Education. Game-Based Learning (GBL) was implemented in one classroom while gamification was used in the other. Through this study, we explore how each of these approaches contribute to enhance students' literacy, allowing them to become active agents and meaning makers who construct their own knowledge (Zapata, 2022; Paesani and Menke, 2023).

2. LITERATURE REVIEW

2.1. Game-based learning and gamification: key features and learning aims

As the demands of a digital and global society evolve, it is essential for students to not only comprehend English texts but also use the language to communicate, interact and think (Kern, 2000; Menke and Paesani, 2023). Likewise, Zapata (2022) highlight that factors such as motivation significantly impact the foreign language learning process. Consequently, active methodologies like GBL and Gamification have gained prominence, especially in primary EFL education, by fostering a dynamic and engaging learning environment. These approaches enable young learners to become meaning-makers and develop their literacy skills through multimodal resources (Reyes-Torres and Portalés, 2020).

GBL integrates game elements into educational activities, transforming language acquisition into an immersive and interactive experience. According to Sánchez (2021), GBL aims to support learning by using games to teach content, develop skills, and assess knowledge. This methodology focuses not just on content acquisition but also on developing broader competencies (Ramírez de Arellano, 2022). GBL operates on the principle of "educating by playing," where the game serves as a tool for learning and skill development (Ortiz, 2021). Sánchez (2021) identifies three levels of GBL implementation: the initial level, which introduces simple, short games; the intermediate level, which encourages deeper engagement with the content; and the advanced level, where games become central to learning in classrooms familiar with this methodology.

In contrast, Gamification involves applying game-like elements, such as competition and rewards, in non-game contexts to influence behaviours and enhance engagement (Teixes, 2015). It is often used alongside other methodologies, serving as a "ludic layer" that transforms the learning experience without altering the core teaching structure (Sánchez, 2021). Gamification can be categorized by its duration: superficial or content gamification is applied to specific activities, while structural or deep gamification is integrated throughout an entire curriculum (Alejaldre and García, 2015). Another classification is based on the type of game elements used, such as board games, role-playing games or video games (Sánchez, 2021).

Both GBL and Gamification share the goal of enhancing motivation and engagement in EFL learning. As noted by Ramírez de Arellano (2022), these methodologies promote multiliteracies by placing learners at the centre of education, enabling them to actively participate in the creation of knowledge. Additionally, both approaches cultivate a sense of curiosity and challenge, which motivates students to engage meaningfully with the language. Fonseca et al. (2023) argue that GBL and Gamification foster cooperative learning, as students collaborate to achieve common goals, thereby strengthening communication, socialization, responsibility and leadership.

Despite their similarities, GBL and Gamification differ in their application. GBL utilizes intentional games —whether pre-existing or teacher-created— to support learning (Ortiz, 2021), whereas Gamification involves embedding game elements into existing

educational frameworks without the use of actual games. These differences allow for the complementary use of both approaches in the EFL classroom (Zhang and Yu, 2022).

While research on game-based methodologies in second language acquisition remains limited, several studies have reported positive outcomes. Cabrera-Solano (2022) found that using GBL with tools like Genially improved academic performance in EFL classes, helping students activate prior knowledge and better prepare for challenges. Esquivel (2019) noted that Gamification promotes interaction among students, facilitating more dynamic and engaging English lessons. Similarly, Redjeki and Muhajir (2021) demonstrated that Gamification boosts motivation and encourages greater effort in learning English.

2.2.   Literacy development, multimodality and games in EFL

Traditionally, an individual was considered literate if he/she had the ability to read and write. These two skills were thought to be sufficient in order to encode and decode messages; however, decoding without making sense of it leads to no real learning (Yates 2007). In the 21st Century society, children are constantly exposed to different types of texts and modes of expression. Hence, the concept of literacy goes beyond reading and writing (Paesani and Menke, 2023). As Kern (2000) emphasizes, literacy involves interpretation, collaboration, conventions, cultural knowledge, problem solving, (self)reflection and language use. In short, it involves communication and, as will be shown, it can be developed through multimodal resources such as games, picture books, graphic novels, short-animated films, advertisements, etc. In this line of thought, Reyes-Torres, Portalés-Raga and Torres-Mañá (2021, p.302) define literacy as "a dynamic and multidimensional process of construction of meaning that enable students to grasp and evaluate information, organize ideas, exchange perspectives and reflect critically on a variety of sociocultural contexts". As learners develop their literacy, they develop their language skills, visual thinking strategies, dialogic attitudes and social practices.

Also, literacy must be considered taking into account the three dimensions that characterize it: personal, conceptual and sociocultural (Kern, 2000; Kucer, 2014). The personal dimension is based on the learner's identity, prior knowledge, attitude, values and natural ability to address a text and create new ideas; the conceptual dimension consists of the contents, topics or linguistic aspects that students need to learn in order to construct meaning through multimodal texts; finally, the sociocultural dimension draws attention to the importance of offering students the opportunity to interact both with the text and with their peers to exchange their points of view. Since this is a process that teachers can expect students to enjoy, this dimension incorporates the notion of aesthetic learning (Rosenblatt, 1986; Kucer, 2014; Reyes-Torres and Portalés, 2020). Students are guided to be open-minded and to value other cultures, ideas, and opinions. Taken together, these dimensions are complementary and equally relevant in the teaching and learning process.

Most importantly, this approach to literacy can be effectively applied through GBL and Gamification in foreign language teaching. In today's multimodal world, learners have access to a wealth of resources that facilitate meaning-making and knowledge

construction. Multimodality refers to the use of various modes of representation—images, sounds, text, colours, and music—working together to create a communicative act (Jewitt and Kress, 2010). In games, learners must decode and create meaning from visual elements, movements, sounds, dialogues, and words, all of which contribute to the learning process.

Additionally, games integrate visual elements that contribute to foster visual thinking, a powerful cognitive tool that helps students to interpret what they see. Visual thinking enhances creativity, improves memory and concentration, helps to organise ideas and involves all the senses in the learning process (McLoughlin and Krakowski, 2001). For this reason, foreign language education must offer a diversity of symbolic and visual forms that enable learners to create meaning from the information they receive, analyse it and produce new ideas. As a result, authors such as the New London Group (1996), Cope and Kalantzis (2015), Paesani (2016), Warner and Dupuy (2018), Lacorte and Reyes-Torres (2021) and Zapata (2022) defend that in the 21st century the term literacy should be replaced by multiliteracies due to the diversity of texts and the different modes of representation.

Multiliteracies not only embrace diverse modes of representation but also incorporate sociocultural practices and new perspectives (New London Group, 1996; Kucer, 2014; Cope and Kalantzis, 2015). Given that children are daily exposed to numerous communication channels, the messages they receive come in a variety of forms. Thus, it is crucial to integrate multimodal resources into classrooms to offer students opportunities to interpret, access, and share information in diverse forms. For EFL teachers, this means using a variety of authentic, multimodal resources to guide students in knowledge construction, ensuring they engage in meaningful, multimodal learning experiences.

In conclusion, the evolving landscape of literacy requires educators to adapt to the multimodal nature of communication in the digital age. By incorporating GBL and Gamification into EFL classrooms, teachers can provide students with opportunities to develop literacy skills that reflect the diverse ways in which language and meaning are constructed today.

### 2.3. The tenets of the pedagogy of multiliteracies

This study follows the postulates of the Pedagogy of multiliteracies, as it seeks to train students to be creators and consumers of various modes of expression. It was in 1994 when the New London Group (NLG) met in New Hampshire to reconsider new ways of looking at how and what students needed to learn in school (Cope and Kalantzis, 2009). Led by Mary Kalantzis and Bill Cope, this group of scholars coined the term multiliteracies with the purpose of adapting literacy to diverse social realities. This pedagogy transcends the limitations of traditional teaching approaches by focusing on learners' linguistic and cultural differences. It is based on the idea that language and the meaning-making process are dynamic resources that learners constantly remake as they interact with them in a given sociocultural context.

This pedagogy incorporates the concept of Learning by Design as the backbone of the multiliteracies framework, which involves three elements: Available designs, Designing and the Redesigned (New London Group, 1996; Cope and Kalantzis, 2009). The Available designs are based on the idea that any type of text incorporates signs or elements –existing meanings and expressions– that can be interpreted, whether verbal, visual or literary-cultural. The act of designing happens when students recognize the available designs and develop their own meaning, which leads to Redesign, which is the result of the students' new interpretation, becoming thus active designers of meaning. In the words of Sánchez (2014), it is the result of human agency, and it can be conveyed through the production of any type of multimodal text that connotes a new understanding (Reyes-Torres et al., 2021). Therefore, the co-construction of meaning between teachers and students always involves the transformation of the available designs. This model is conceived as a cyclical one, since learning is an active process in which learners continuously evolve with the mediation of teachers.

To implement it, the NLG proposes the Knowledge Processes Framework (KPF) that consists of four pedagogical acts: experiencing, conceptualizing, analyzing and applying. Since it is a recurrent process, as illustrated in Figure 1, Cope and Kalantzis (2015) suggest combining them depending on the learning objectives.

Figure 1

The knowledge processes framework
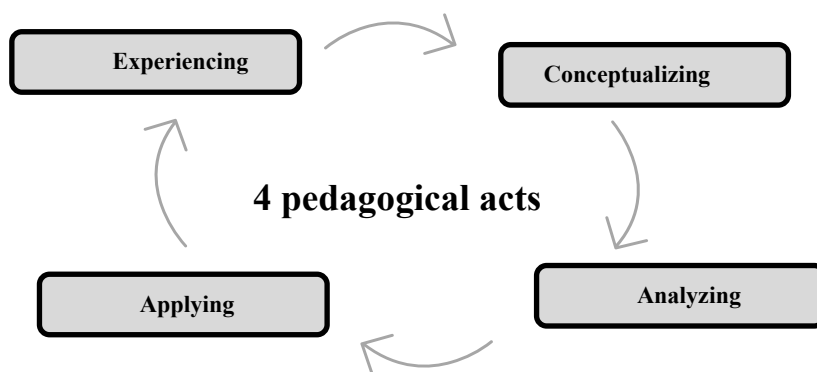
Note. Prepared by the authors based on NLG (1996).

"Experiencing" consists of engaging learners cognitively to use the language. The goal of the teacher is to activate students' minds to reflect and relate content to previous experiences. Secondly, in order to prepare learner to reflect, it is crucial to design sessions based on the concepts they need to learn to develop their knowledge. This is what the act of "conceptualizing" is all about. Next, "analyzing" is based on the relationship between textual and visual meaning with social, cultural, historical and ideological contexts and

objectives. Finally, "applying" refers to the fact that learners should become producers of knowledge during the whole learning path. As can be seen, the four pedagogical acts are fundamental for the effective and meaningful implementation of the multiliteracies pedagogy.

3. RESERCH DESIGN

The research employs a mixed methodology, strategically leveraging the strengths of both qualitative and quantitative methods, specifically, utilizing a convergent design (Creswell and Plano Clark, 2018). As emphasized by Creswell (2009), the integration of these approaches offers more advantages than their individual use, given their interdisciplinary nature, enhancing the depth of analysis and understanding of results. In this study, a qualitative methodology is used, recognizing observation as a method of argumentation. Qualitative procedures draw upon data from textual and visual sources, with the researcher serving as a pivotal instrument in data collection. Simultaneously, a quantitative methodology is utilized, with numerical data collection to yield objective and measurable outcomes. This method encompasses the entire processes of collecting, analysing, interpreting and writing up research results (Creswell, 2009).

3.1. Research objectives and questions

The primary objectives of this research are to assess the effectiveness of Game-Based Learning (GBL) and Gamification in enhancing multiple literacies among EFL students and to investigate the differences and commonalities in learner engagement and motivation between these two approaches. Specifically, the research seeks to answer the following questions:

- How do Game-Based Learning (GBL) and Gamification influence the development of literacy in primary EFL classrooms?
- What are the differences and similarities in learner engagement and motivation between Game-Based Learning and Gamification approaches in the EFL context?

3.2. Context and participants

The educational intervention was conducted during the 2022-2023 academic year at Federico Maicas School, a public school in Torrent, a suburban area of Valencia, Spain. The school serves a socioeconomically diverse neighbourhood and enrols students across two classes per year, with a maximum of 25 students per class. Table 1 below presents key demographic and academic characteristics of two third-grade classes (3rd A and 3rd B) participating in the study.

Table 1

Students' characteristics

	3rd A	3rd B
Number of students	24	24
Number of girls	11	11
Number of boys	13	13
Age of students	8-9-10	8-9
Nationalities	Spanish Russian Colombian Iraqi	Spanish Moroccan Italian Argentinean
Students at 2nd level of Primary Education (split level)	4	3
SEN	1	3
Which one(s)?	1 ADHD	2 high capacities 1 ADHD

Note. Prepared by the authors.

The school's English course relied mainly on textbooks, with few activities beyond these resources. During the initial days of classroom observation previous to the investigation, the teacher-researcher noted the students' enthusiasm for board games and the Mario Bros video game. These observations inspired the design of two tailored educational interventions based on these interests. This research aimed to show students that language learning could be engaging and enjoyable.

3.3. Procedure

The research followed three phases. First, initial student motivation towards English was assessed via focus group interviews and a pre-questionnaire. This was followed by a classroom intervention using the teacher's work diary to collect observational data. The intervention was centred on two units around identical content but used different methodologies for each class. Both groups discussed gender stereotypes in professions through a video (https://bit.ly/3Wo8DWQ) and engaged in vocabulary-building team activities on "Jobs."

Class 3rd A used gamification, tackling five Mario Bros-themed challenges (see Annex 1) to "save Luigi," integrating video game elements. Class 3rd B engaged in Game-Based Learning (GBL) with five games—Memory, Domino, Bingo, Who's Who, and Goose Game (see Annex 2)—to introduce the vocabulary. Finally, student motivation and satisfaction were measured via post-activity questionnaires, and a vocabulary test was administered to assess learning outcomes.

Tables 2 and 3 outline the schedules for classes 3rd A and 3rd B. Each timetable divides the phases into specific dates and activities, starting with data collection on prior motivation, followed by the intervention phase, and concluding with post-intervention assessments.
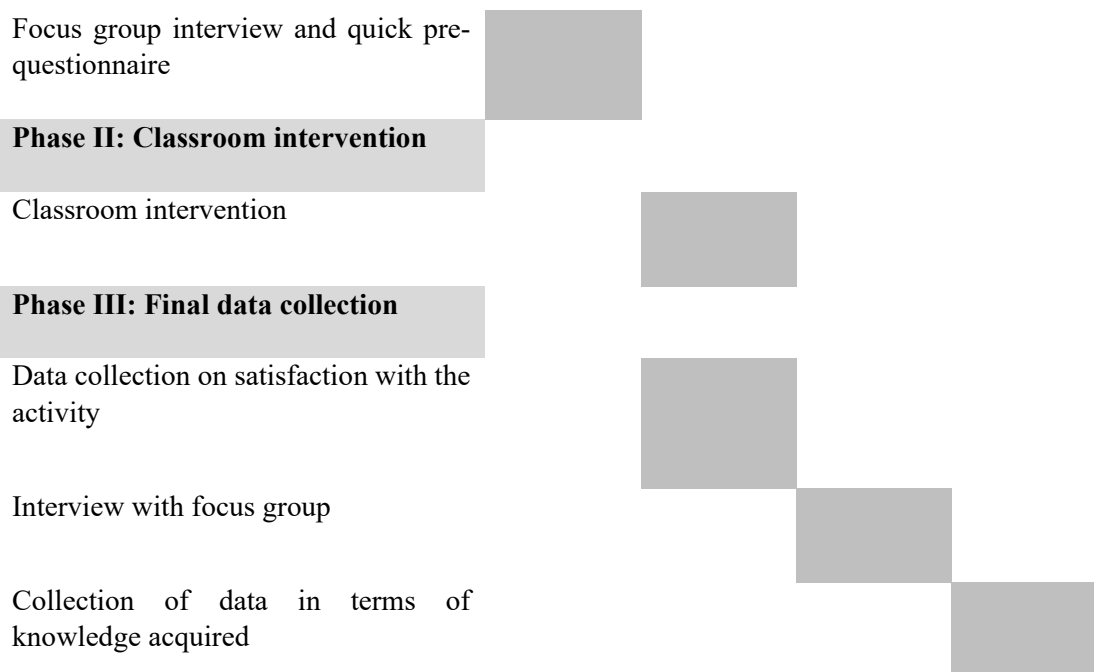
Table 2

3rd A class schedule

	3rd A class			
	Wed 3rd May	Fri 5th May	Mon 8th May	Tue 9th May
Phase I: Collection of background information				
Focus group interview and quick pre-questionnaire	▓			
Phase II: Classroom intervention				
Classroom intervention		▓		
Phase III: Final data collection				
Data collection on satisfaction with the activity		▓		
Interview with focus group			▓	
Collection of data in terms of knowledge acquired				▓

Note. Prepared by the authors.

Table 3

3rd B class schedule

	3rd B class			
	Wed 26th April	Fri 28th April	Mon 1st May	Tue 2nd May
Phase I: Collection of background information				

Focus group interview and quick pre-questionnaire	
Phase II: Classroom intervention	
Classroom intervention	
Phase III: Final data collection	
Data collection on satisfaction with the activity	
Interview with focus group	
Collection of data in terms of knowledge acquired	

Note. Prepared by the authors.

On the other hand, regarding students' literacy development, the specific learning objectives were categorized into three major groups, aligning with the three dimensions of literacy (Kucer, 2014) explained earlier and linked to the four pedagogical acts and specific competences in the Spanish national educational curriculum, as detailed in Tables 4, 5 and 6.

Table 4

Learning objectives for the conceptual dimension of literacy

Specific competences	Objectives of the intervention	Pedagogical acts
C.E.1 Multilingualism and interculturalism	Pronounce the vocabulary correctly (Jobs)	Conceptualizing
	Reflect on the difference between the Spanish and English language in relation to the gender of nouns	Analyzing
C.E.2 Oral (and visual) comprehension	Interpret information from audiovisual resources	Experiencing
C.E.3 Reading comprehension	Decode the information expressed in written texts	Experiencing
C.E.4 Oral expression	Express ideas and solutions using the foreign language	Experiencing and applying

C.E.5 Written expression	Know how to write correctly the vocabulary worked on (Jobs)	Conceptualizing
C.E.6 Oral interaction	Communicate with peers orally during activities using the foreign language	Experiencing and analyzing
C.E.7 Oral mediation	Reflect ideas and emotions using an audio-visual resource	Experiencing and analyzing
	Explain what an activity consists of to classmates	Applying

Note. Prepared by the authors.

Table 5

Learning objectives for the personal dimension of literacy

Specific competences	Objectives of the intervention	Pedagogical acts
C.E.1 Multilingualism and interculturalism	Associate the new vocabulary with their previous knowledge	Conceptualizing
C.E.1 Multilingualism and interculturalism	Reflect on a current issue (gender stereotypes at work)	Analyzing
	Create a welcoming and safe working environment, so that they can express their opinions freely and develop their critical thinking	Experiencing

Note. Prepared by the authors.

Table 6

Learning objectives for the sociocultural and aesthetic dimension of literacy

Specific competences	Objectives of the intervention	Pedagogical acts
C.E.6 Oral and written interaction	Know how to work in a team	Experiencing
C.E.6 Oral and written interaction	Interact with peers	Experiencing and applying
	Enjoy learning English	Experiencing
	Increase interest in and motivation for the subject	Experiencing

C.E.1 Multilingualism and interculturalism	Understand that there are other ways of learning languages	Experiencing and analyzing

Note. Prepared by the authors.

3.4. Instruments

To achieve the research objectives, several instruments were employed. As already noted, classroom observation was documented daily in a teacher's work diary. During Phases I and III, focus group interviews with five representative students per class were conducted to compare their motivation levels and explore their ideas for alternative learning methods in English. For this purpose, the following quick pre-questionnaire assessed initial motivation levels for the entire group in Phase I, through two questions focusing on EFL.

Figure 2

Pre-questionnaire

Pre-questionnaire

Circle the answer according to your opinion.

Do you usually like English classes?	No	A little bit	More or less	Yes	A lot
Do you look forward to English lessons with the teacher?	No	A little bit	More or less	Yes	A lot

Note. Prepared by the authors.

The two didactic units—one focused on Mario Bros gamification, the other on various board games—formed the core of the classroom intervention. The activities carried out are specified in Annexes 1 and 2. Furthermore, a post-session questionnaire using a Likert scale (0 to 4) measured satisfaction and motivation (see Figure 3). According to Maldonado (2007), this scale effectively quantifies responses, providing reliable data for academic research (Blanco and Alvarado, 2005; Bedoya, 2017). Through these questions, the aim was to find out whether the students had enjoyed the class, whether they would like to repeat this type of session and whether they had learned new concepts and how to work collaboratively. Students also rated the session on a 1–10 scale and identified their primary emotions during the activities.

Figure 3

Post-questionnaire

Post-questionnaire
Circle the answer according to your opinion.

Did you have fun in class today?	No	A little bit	More or less	Yes	A lot
Would you like to repeat this kind of activities?	No	A little bit	More or less	Yes	A lot
Do you think the materials have helped you in your learning?	No	A little bit	More or less	Yes	A lot
Did you learn new jobs in English?	No	A little bit	More or less	Yes	A lot
Did you learn how to work in a team with your classmates?	No	A little bit	More or less	Yes	A lot

Mark today's lesson on a scale of 1 to 10. Colour the circle.

👎 ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ 👍
    1   2   3   4   5   6   7   8   9   10

How did you feel during the class? Circle it.

Excited	Happy	Sad	Worried	Angry

Note. Prepared by the authors.

Three days later, a written test evaluated vocabulary retention to compare learning outcomes between the GBL and Gamification methods. In addition, a rubric has been used to evaluate the research process carried out, taking into account different categories. According to Stevens and Levi (2012), rubrics are valuable pedagogical tools because they make us more aware of our individual teaching styles and methods and allow us to impart more clearly our intentions and expectations.

Figure 4

Intervention rubric

Method	EXCELLENT	SATISFACTORY	ELEMENTARY	INADEQUATE
	Detailed explanation of the research method used.	Explanation of the research method used.	Brief explanation of the research method used.	Insufficient explanation of the research method used.
Research objectives and questions	Presentation of the research objectives in a clear, concise and concrete manner.	Clear presentation of the research objectives.	Presentation of the research objectives with problems of explanation.	No clear, concise and concrete presentation of the research objectives.
Context and participants	Analysis of the context and study participants, taking into account various characteristics (more than 6).	Analysis of the context and study participants, taking into account a few characteristics (3-5).	Analysis of the context and study participants, taking into account few characteristics (less than 2).	No analysis of the context and study participants.
Procedure and instruments	Implementation of three differentiated phases through the use of various instruments to systematically collect information.	Implementation of three phases with little differentiation through the use of a few instruments to collect information in a systematic way.	Implementation of three mixed phases through the use of few instruments to collect information.	Implementation of a single mixed phase, using a few instruments to collect information.
Conceptual dimension	Correct pronunciation and reflection on linguistic differences through various multimodal resources.	Pronunciation with few errors and reflection on linguistic differences through some multimodal resources.	Pronunciation with some errors and little reflection on linguistic differences through a few multimodal resources.	Pronunciation with many errors and no reflection on linguistic differences.
Personal dimension	Relating new knowledge to its immediate surroundings and creating a safe learning space.	Little relationship of new knowledge with its immediate surroundings and creation of a safe learning space.	Little relationship of new knowledge with its immediate surroundings without the creation of a safe learning space.	No relationship of new knowledge with its immediate surroundings and no creation of a safe learning space.
Sociocultural and aesthetic dimension	Collaborative learning in a respectful and participatory way.	Collaborative learning with small problems that they solve under the guidance of the teacher.	Collaborative learning with problems and conflicts between them.	No collaborative learning.
Students' satisfaction, motivation and emotions during the intervention	High satisfaction and motivation of the students towards the activities, producing positive emotions in them.	Satisfaction and motivation of students towards the activities, producing some positive emotions in them.	Satisfaction and motivation of students towards the activities, without producing positive emotions in them.	No satisfaction and motivation of students towards the activities, producing negative emotions in them.
Knowledge acquired	Acquisition of new knowledge about the trades (10 - 12 correct answers and several extra words).	Acquisition of new knowledge related to the trades (7 - 9 correct answers and some extra words).	Acquisition of new knowledge related to the trades (more than 5 correct answers and no extra words).	Acquisition of new knowledge related to the trades (less than 5 correct answers and no extra words).

Note. Prepared by the authors.

4. RESULTS

The achievement of research objectives hinges on the obtained results. Given the mixed methodology employed, results are categorized into two main blocks, those referring to the qualitative method and, in addition, those derived from the quantitative method.

4.1. Qualitative methodology

Results were gathered and categorized based on the three dimensions of literacy (conceptual, personal and socio-cultural and aesthetic) described in Tables 4, 5 and 6. Tables 7, 8 and 9 present the definition of each category, along with their corresponding codes and subcodes extracted from the content analysis conducted in the context of this study.

Table 7

Definition of codes and subcodes of the conceptual dimension

Categories	Definition	Codes	Definition	Subcodes	Definition
Conceptual dimension	This category refers to the construction of meaning through multimodal texts.	Correct pronunciation and writing of vocabulary **PW**	Use of new vocabulary in an appropriate way		
		Reflection on the difference between the Spanish and English language **RD**	References to the differences between languages in terms of noun gender		
		Interpreting information from multimodal texts **IM**	Description and personal opinion through multimodal resources	Audiovisual resources **RES** Written texts **TEX**	Interpretation of a video Interpretation of written messages
		Ideas and emotions **IE**	Learner references to ideas and emotions	Use of the English language **UE**	Use of the English language

| | | | | Oral mediation

MED | Intervention between a multimodal resource and a partner |

Note. Prepared by the authors.

Table 8

Definition of codes and subcodes of the personal dimension

Categories	Definition	Codes	Definition	Subcodes	Definition
Personal dimension	This category encompasses those aspects related to the learner's identity, prior knowledge, attitudes, values and natural ability to deal with text and create new ideas.	Connecting ideas **CI**	Relation between the new vocabulary and their previous knowledge	Concepts learned in the classroom **CON** Previous personal experiences **EXP**	Relation with contents worked on in class Allusions to previous experiences
		Critical reflection **RC**	Critical thinking in relation to current issues in society	Gender stereotypes at work **STE**	Recognition of the clichés between men and women in the professions.
		Creating safe space **CS**	Generating a welcoming working environment		

Note. Prepared by the authors.

Table 9

Definition of codes and subcodes of the sociocultural and aesthetic dimension

Categories	Definition	Codes	Definition	Subcodes	Definition
Sociocultural and aesthetic dimension	This category is based on the cultural	Cooperative learning	Peer-to-peer knowledge building	Interaction with peers **INT**	Use of the English language to communicate

	CL		Teamwork TEA	Skills to be able to work in groups
context in which the learners are situated.	Increased interest in the subject INT	Situations demonstrating learner motivation towards the foreign language	Enjoyment of learning English ENJ	References to enjoyment of learning English
			Knowledge of other ways of learning languages OW	References to learning a language in different ways

Note. Prepared by the authors.

According to this classification, the findings highlight the nuanced effects of the educational interventions. Each dimension reflects unique aspects of how students engaged with the learning process and responded to the activities.

The conceptual dimension revealed significant improvement in students' vocabulary mastery and linguistic awareness. Activities such as team-based communication tasks enabled students to practice correct pronunciation and writing while reinforcing vocabulary through repetition. For example, groups successfully identified and described professions like "nurse" and "firefighter," which strengthened their confidence in both oral and written language. Additionally, students demonstrated an ability to reflect on linguistic differences, such as observing that English uses a singular form for "nurse," unlike the gendered forms in Spanish. Multimodal tools like videos and written texts further encouraged active interpretation and teamwork, as seen during the Goose Game, where students collaboratively solved challenges. Moreover, open discussions allowed learners to express their preferences for engaging learning methods, including songs and videos, over traditional textbooks.

The personal dimension emphasized how students connected new knowledge to their personal lives, engaged in critical reflection, and benefited from a safe and supportive learning environment. Many students related the new vocabulary to their personal experiences, such as referencing family members' professions or prior knowledge. Through discussions and video-based activities, students reflected on societal issues like gender stereotypes, concluding that "you can be anything you want to be," regardless of gender. The creation of a safe space played a pivotal role in boosting students' confidence. Learners who were previously hesitant to participate due to fear of making mistakes reported feeling more at ease, with one student noting, "I liked this class because no one laughed if I made a mistake".

The sociocultural and aesthetic dimension highlighted the importance of collaborative learning and its impact on motivation. Group activities fostered teamwork

and cooperative problem-solving, with students noting that tasks were completed faster and with greater enjoyment when working together. This sense of collaboration extended beyond the classroom, as some students expressed a desire to continue activities like the Goose Game during their free time. The combination of these activities sparked excitement and sustained interest in learning English. One student remarked, "Can we use some of the games in the playground? They are so fun!" This enthusiasm reflects the potential of collaborative and enjoyable methods to transform students' attitudes toward language learning.

4.2. Quantitative methodology

The quantitative findings reinforced the qualitative insights, revealing the transformative effects of GBL and gamification on student motivation, satisfaction, and knowledge retention. An initial assessment of students' motivation levels revealed a diverse range of interest in English before the intervention. For this first specific category, emphasis was placed on two questions, graded on a Likert scale ranging from 0 to 4. The cumulative score, therefore, ranges from 0 to 8, representing the sum of the two questions. In both Class 3A and Class 3B, approximately 50% of students scored below 4 on an 8-point scale, indicating low motivation. This highlighted the potential for targeted interventions to enhance engagement and enthusiasm for language learning.

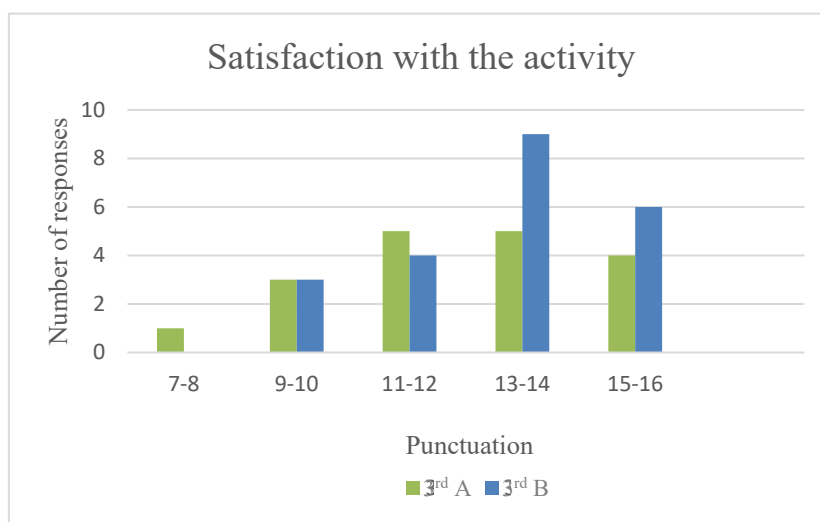**Figure 5**

Students' previous motivation
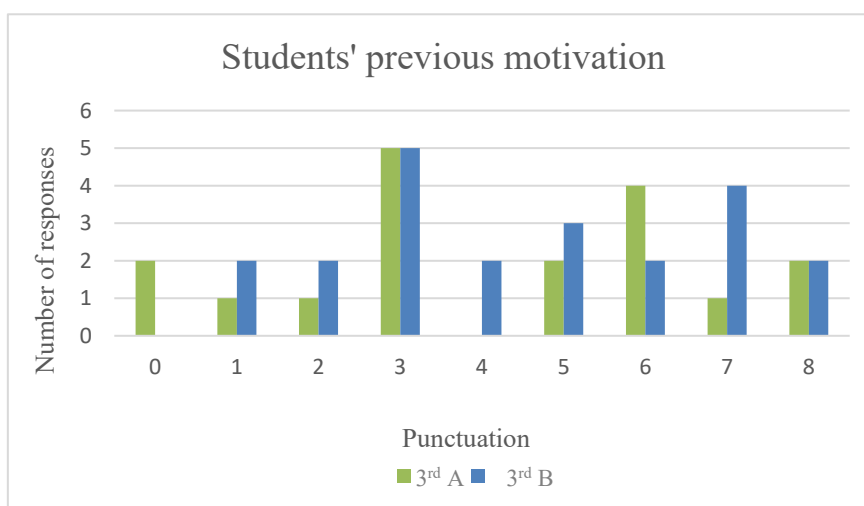
Note. Prepared by the authors.

Following the intervention, students' satisfaction levels soared, as depicted in Figures 6 and 7. Every student rated the sessions above 6 on a 10-point scale, with mean satisfaction scores of 9.17 for Class 3A and 9.50 for Class 3B. Emotional responses during the sessions further underscored the success of these methods. In Class 3A, nearly half

the students reported feeling "excited," while others described feeling "happy" or a mix of both (Figure 8). Similarly, in Class 3B, 53% of responses reflected excitement and happiness, with one student even expressing sadness at the class's conclusion, wishing the activities could continue (Figure 9).
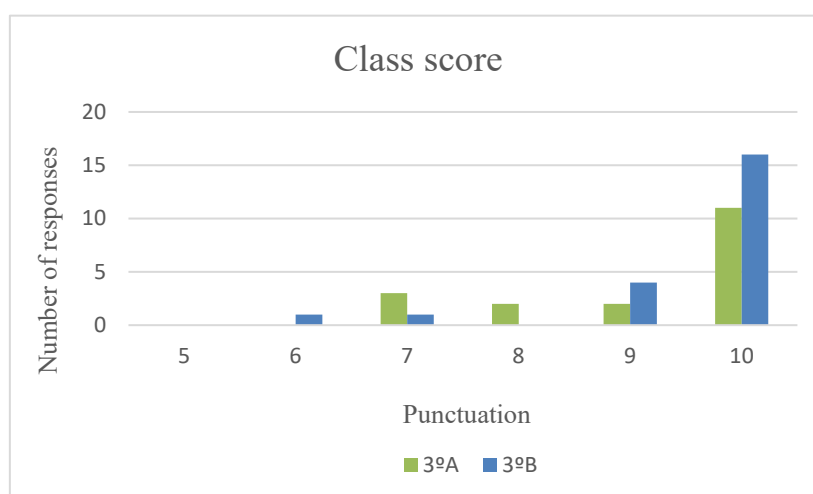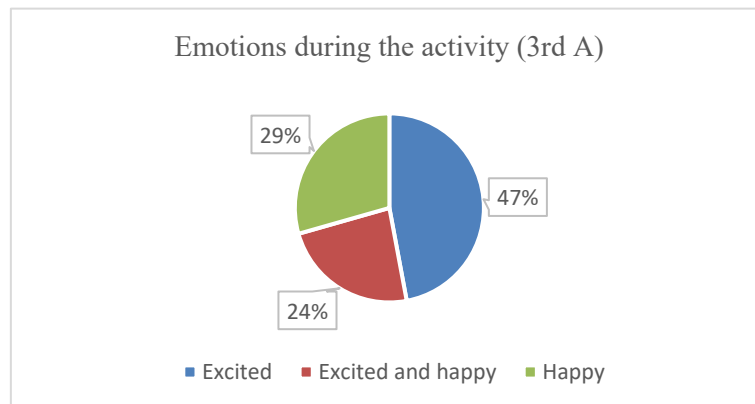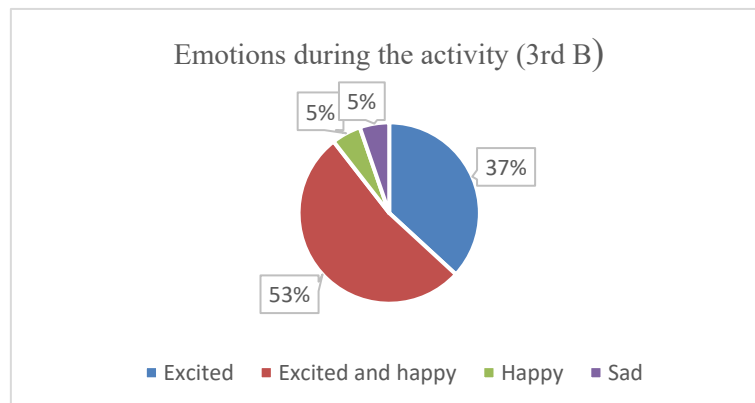
Figure 6

Satisfaction with the activity

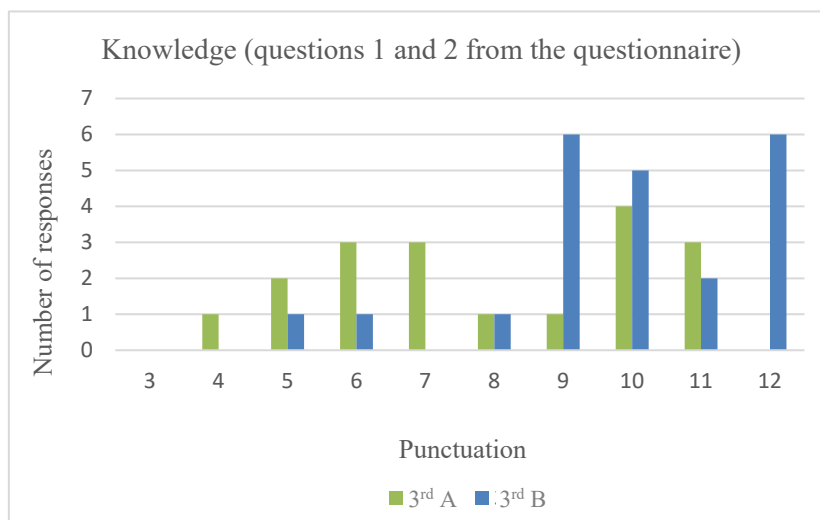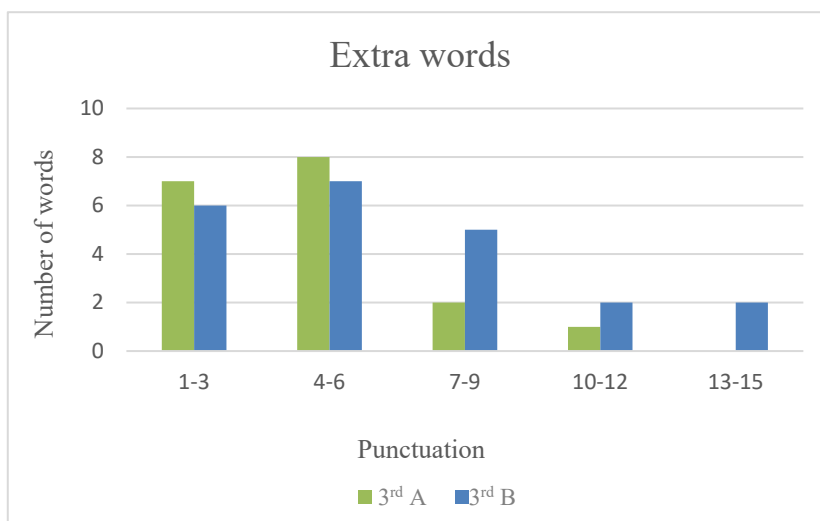*Note*. Prepared by the authors.

Figure 7

Class score

Note. Prepared by the authors.

Figure 8

Graph of the 3rd A students' emotions

Note. Prepared by the authors.

Figure 9

Graph of the 3rd B students' emotions

Note. Prepared by the authors.

Knowledge assessments after the sessions highlighted notable differences between the two methodologies. In the GBL group (Class 3B), 91% of students answered the majority of questions correctly, compared to 53% in the gamification group (Class 3A) (Figure 10). This disparity can be attributed to the higher frequency of vocabulary repetition in GBL activities, which allowed students to engage with key terms multiple times across various games. Additionally, students in Class 3B excelled in recalling extra vocabulary, outperforming their counterparts in Class 3A (Figure 11). One student remarked "I can remember words better because we used them in all the games", emphasizing the value of repeated, meaningful interactions with the material.

Figure 10

Knowledge through questions 1 and 2 from the questionnaire

Knowledge (questions 1 and 2 from the questionnaire)

Note. Prepared by the authors.

Figure 11

Extra words

Extra words

Note. Prepared by the authors.

The primary reason for these outcomes could be attributed to the fact that in Gamification, each vocabulary word appeared only once during the lesson. In contrast, all the words were featured in all the GBL games. Consequently, students in 3rd A engaged with each job only once in one of the challenges, while in 3rd B, all the jobs

were addressed five times, once in each game. This facilitated a more meaningful acquisition of the new vocabulary for the 3rd B students.

5. DISCUSSION

This research, grounded in both quantitative and qualitative methods, examined the effects of GBL and Gamification on literacy development and learner engagement in primary EFL classrooms. By analyzing data from literacy assessments, engagement surveys, student interviews, and classroom observations, the study provides a multi-dimensional perspective on how these methods influence not only academic skills but also personal, conceptual, sociocultural and aesthetic experiences of students.

Personal Dimension: GBL and Gamification both shaped students' personal connections to language learning, though in different ways. The immersive narratives in GBL allowed students to explore personal meaning in language, fostering self-expression and individual interests, as supported by qualitative interviews where students shared feelings of personal achievement and enjoyment in narrative-based tasks. Gamification, with its reward-based system, appealed to personal ambition and a sense of accomplishment, particularly for students motivated by competition. This personal dimension reveals how both approaches encourage students to view language learning as a meaningful part of their identity, with GBL fostering intrinsic motivation through exploration and Gamification providing motivation through visible progress.

Conceptual Dimension: From a conceptual perspective, the findings indicate that GBL is effective in promoting critical thinking and deeper understanding of language as a system, while Gamification supports memorization and recall of language rules. Quantitative data revealed that GBL contributed to advanced literacy skills, like comprehension and inference, as students engaged with complex scenarios that required critical thinking. Observational data corroborated this, as students used language more flexibly and creatively during GBL activities. In contrast, Gamification provided a scaffold for conceptual mastery of foundational elements, such as vocabulary and grammar, making it an effective approach for developing a strong base in language mechanics. Both methods thus contribute distinctively to conceptual literacy development, underscoring the complementary nature of GBL's depth and Gamification's breadth.

Sociocultural Dimension: This dimension, essential in language acquisition, emerged strongly in the way GBL and Gamification fostered collaboration and social engagement. Observational data showed that GBL often facilitated peer interaction and collective problem solving, aligning with social constructivist principles where learners co-construct understanding through interaction. Many students reported feeling a sense of belonging and teamwork within GBL activities, reflecting a sociocultural integration into language learning. Meanwhile, Gamification, while more individually oriented, also tapped into students' desire for social recognition, as leader boards and badges motivated friendly competition and social engagement. These sociocultural elements support the idea that both approaches create interactive learning environments, GBL through

cooperative play and Gamification through competitive dynamics, enriching the social context of the EFL classroom.

Aesthetic Dimension: Due to its narrative richness, GBL provided an aesthetic dimension where students could engage with language as part of a larger, often visually captivating story, adding a layer of emotional resonance to language tasks. Classroom observations and interviews revealed students' enjoyment of the world-building aspects of GBL, where language was presented not merely as a skill but as a creative experience. Gamification, though structured around goals and rewards, also introduced an aesthetic element through the design of badges, points, and levels that visually marked students' progress. These aesthetic features increased motivation by making learning visually rewarding, though perhaps more extrinsically.

6. CONCLUSION

The findings of this study address the research questions and highlight the benefits of incorporating GBL and gamification in EFL instruction. These methods significantly enhanced students' motivation and interest in English while fostering literacy development. Notably, the GBL approach produced superior outcomes in terms of vocabulary retention and application, as students engaged with repeated use of words across multiple games. Gamification also demonstrated effectiveness, particularly for smaller sets of vocabulary consistently reinforced throughout the challenges.

However, these methodologies are not without limitations. While students actively participated and acquired new vocabulary, they lacked opportunities for reflective practice and real-world application of their learning. Reflection occurred primarily through external activities, such as video discussions, rather than being embedded within the games themselves. Similarly, the application of acquired knowledge —a core pedagogical goal— was underdeveloped during the sessions. Incorporating supplementary activities designed for reflection and practical application is essential to fully realize the potential of these methods. Consequently, GBL and gamification should not be used in isolation but as complementary tools alongside other instructional methodologies to foster a well-rounded learning experience.

Furthermore, the effectiveness of GBL and gamification may depend on broader contextual factors that were not addressed in this study. For instance, the availability and quality of technological resources (e.g., tablets, interactive whiteboards, or stable internet access) can significantly impact how well these methods are implemented and received by students. Additionally, parental involvement in reinforcing language-learning games at home could play a crucial role in extending the benefits of these methods beyond the classroom, fostering deeper engagement and retention of knowledge. Lastly, the influence of peer dynamics —whether through collaboration, encouragement, or rivalry— can shape how students perceive and participate in gamified or game-based activities. These factors warrant further investigation, as they may hold the key to optimizing the implementation of GBL and gamification in diverse educational contexts.

The study's limitations include its small sample size and single-school setting, which constrain the generalizability of the findings. Future research should expand to more diverse populations to assess whether these results hold across varying demographics. Longitudinal studies could also explore the sustained benefits of these approaches, examining whether their motivational effects persist over time. Additionally, comparative research in different cultural and educational contexts would provide valuable insights into the broader applicability of these methods.

In conclusion, GBL and gamification offer powerful tools for enhancing engagement and language acquisition in EFL classrooms. Their value lies not in replacing traditional methods but in supplementing them to create more dynamic, interactive, and motivating learning environments. Language educators are encouraged to experiment with these approaches, integrating them thoughtfully into their teaching practices. After all, play is a vital part of life and, consequently, a crucial element of education. So, we pose the question to you, teacher: "Are you ready to play?".

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ANNEX 1

Gamification activities

Challenge 1: "Match the image with its word"
In the first Gamification challenge, students matched images to corresponding words, focusing on recognizing trades and ensuring the correct pairing of words with visuals.

Challenge 2: "Choose the correct word)
Students worked in teams to place the vocabulary cards next to the corresponding picture, fostering collaboration while reinforcing their understanding of word meanings.

Challenge 3: "Circle the correct option"
Presented with three options for each image, students collaboratively identified and eliminated incorrect choices. This activity encouraged discussion and teamwork to reach a consensus.

Challenge 4: "Complete the following words"
Students completed vocabulary words by filling in missing letters, relying on image recognition and spelling knowledge. This activity emphasized precision in word construction.

Challenge 5: "Kahoot"
Using the school's tablets, students participated in a fast-paced, interactive Kahoot quiz. This final challenge assessed their mastery of the content while also enhancing their digital competence.

ANNEX 2

GBL activities

Memory
One of the games used in the GBL methodology has been the memory game. This classic game was adapted to reinforce vocabulary. Students took turns flipping over two face-down cards, aiming to match pictures of jobs. The player with the most pairs at the end won. This activity enhanced memory and visual recognition.

Domino
In this modified domino game, pieces featured a vocabulary word on one side and a corresponding picture on the other. To place pieces, the image on one had to match the word on another. Students worked together to form a complete circular domino layout, emphasizing teamwork over individual competition.

Bingo
Each student received a card featuring 12 job-related pictures. Words were drawn randomly from a bag, and students marked corresponding images on their cards. Completing a line required calling out "Line," while filling the entire card called for "Bingo." This game developed reading, pronunciation, and image-word associations.

Who's who

In this guessing game, one student selected a card featuring a job, while others used a board with 36 images to deduce the chosen profession. By asking yes/no questions, players practiced question formulation and speaking skills. Structured prompts helped students construct their queries effectively.

Goose game

The Goose Game adapted its traditional format to include vocabulary-based challenges. Players advanced by rolling a die, landing on squares with job-related questions such as "Who works at the fire station?" Correct answers allowed them to stay; incorrect answers sent them back. Special squares, like "Goose," offered opportunities to move ahead. The game combined language practice with a playful, competitive element.