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Effects of Gamifying the EFL Classroom

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Resumen

La gamificación en el ámbito educativo ha sido estudiada en los últimos años debido al desarrollo tecnológico y su influencia en los estilos de aprendizaje de las generaciones más nuevas. La gamificación se define como la implementación de mecánicas de juego en contextos no lúdicos como un medio para fomentar la motivación y el compromiso. El uso de juegos y mecánicas de juego para satisfacer las necesidades de los estudiantes modernos ha sido estudiado y ha mostrado resultados positivos en cuanto a su motivación; sin embargo, aún existe controversia sobre si la gamificación es efectiva para mejorar las habilidades lingüísticas y sistemas. Este estudio tiene como objetivo analizar los resultados reportados sobre la implementación de la gamificación en las aulas de inglés como lengua extranjera y explorar las percepciones de los estudiantes y profesores en cuanto a la gamificación. Para esta síntesis de investigación, se han seleccionado, revisado y analizado 21 artículos empíricos. Los hallazgos indican que la gamificación es efectiva para fomentar la motivación de los estudiantes, actitudes positivas hacia el aprendizaje y mejorar el rendimiento lingüístico. Además, las percepciones de los estudiantes y profesores sobre la gamificación siguen siendo contradictorias y están en constante construcción; por lo tanto, se necesita más investigación para aclarar la visión de la gamificación en el contexto educativo y ayudar a guiar a los instructores que desean implementarla en las aulas de inglés como lengua extranjera.

Palabras clave del autor: gamificación, motivación, actitudes positivas, rendimiento lingüístico, percepciones de estudiantes y profesores



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Abstract

Gamification in the educational field has been studied in recent years due to technological developments and their influence on newer generations' learning styles. Gamification is defined as the implementation of game mechanics into non-game contexts as a means of fostering motivation and engagement. The usage of games and game mechanics to meet the needs of modern learners has been studied and shown positive results regarding students' motivation; however, there is still controversy on whether gamification is effective in improving language skills and systems. This study aims to analyze the reported outcomes of implementing gamification in EFL classrooms and explore students' and teachers' perceptions of gamification. In this research synthesis, 21 empirical articles have been selected, reviewed, and analyzed. The findings indicate that gamification is effective when fostering students' motivation and positive attitudes toward learning as well as enhancing language performance. Moreover, students' and teachers' perceptions of gamification are still contradictory and in constant construction; therefore, more research is needed to clarify the view of gamification in the educational context and help guide instructors who want to implement it in EFL classrooms.

Author Keywords: Gamification, motivation, positive attitudes, language performance, students' and teachers' perceptions



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María José Tinoco

Dedication

To my parents, Freddy and Nelly, who despite all the difficult situations we have gone through, have always supported me and each decision I made. Also, they have encouraged me to keep going and never give up even if things appear to be the worst. I will not be the person I am without my parents' support and effort. I hope they feel that all they have made for me now is worth it.

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Introduction

Gamification is an emerging trend in the educational context (Caponetto et al., 2014). This approach refers to the usage of game-based elements in non-game environments as a means of using game-based elements in non-game environments to foster students' interest and upgrade their experience (Yavuz et al., 2020). As gamification is a relatively new topic of interest in education, different researchers have conducted empirical studies on it to find out how it works and how effective it is to use in English as a Foreign Language (EFL) contexts. Gamification has been tested in different EFL classrooms, signifying different factors and aspects. The objective of this research synthesis is to analyze the reported effects of using gamification in EFL classrooms.

This research synthesis is organized into five chapters, which contain detailed information on the different stages carried out during this study. The first chapter provides background information on gamification, which led to the need to investigate the topic; moreover, chapter one contains details regarding the problem encountered and the research questions and objectives. The second chapter covers crucial concepts for understanding the subject developed in this work such as the definition of gamification, the difference between gamification and game-based learning, and the uses of gamification; the literature review, which consists of an overview of the research that has been developed in the area is also comprised in this chapter. The third chapter describes the methodology used to collect, categorize, and analyze the articles presented in this research. The fourth chapter details the analysis of the collected articles, which is divided into four sections, including students' and teachers' perceptions about gamification, the effects of gamification on learning skills, and the effects of gamification on learning systems to address the different research questions and fulfill the objectives. Finally, the fifth chapter presents the conclusions and recommendations of the research; this chapter completes the study by providing conclusions based on the analysis of data and generating proposals and suggestions for future and present work.

CHAPTER I

Background

Gamification is known as the implementation of game-based elements into non-game contexts, education in this case, so as to increase students' interest and improve their experience (Yavuz et al., 2020). Along the same lines, Anderson et al. (2017) defined gamification as the application of games in educational environments. Furthermore, according to Arunsitot (2021), gamification utilizes game mechanics by enhancing the use of different applications to motivate learners to solve problems, do various tasks, and apply their knowledge in real-life situations. Motivation is fostered using points, levels, rewards, and achievements.

The term gamification was first coined in the 2000s, but it started to call scholars' attention when various industry players and conferences began to talk about it for more audiences in the second half of 2010 (Groh, 2012). A couple of years later, gamification caught the attention of the scientific community; then, it started to be used in the educational field. As mentioned by Groh (2012), even though most gamified applications are digital, gamification must not be limited to technology. Nevertheless, the application of game elements, like leaderboards, levels, turns, time limits, clear goals, and challenges, among others, can be found in several online applications, which are the current tools for having gamified activities in the classroom.

On the other hand, it is important to differentiate between game-based learning and gamification. The former has to do with "the adoption of games for educational purposes" (Caponetto et al., 2014, p. 55), and the latter denotes "the application of game mechanisms to educational interventions globally" (Caponetto et al., 2014, p. 55). Thus, gamification is a more global concept, but according to the same author, both concepts can "coexist and nurture each other" (Caponetto et al., 2014, p. 55).

Understanding these educational approaches is particularly relevant in the context of English learning, which has become a necessity since it has spread almost all over the world in several fields, including education (Rao, 2019). Unquestionably, English has a unique place among languages, especially because it is considered an international language, which involves the fact that English is also a lingua franca (Seidlhofer, 2005). This means that "English is chosen as the means of communication among people from different first language backgrounds, across linguacultural boundaries" (Seidlhofer, 2005, p. 339). Therefore, in various countries, English has established itself as a second or foreign language (ESL/EFL). Regarding

education, students who go to foreign countries to continue with their studies must know English since most courses are taught in that language as mentioned by Rao (2019).

Nowadays, and intending to improve learners' engagement and motivation, gamification is a current matter in EFL learning (Caponetto et al., 2014). In fact, according to Caponetto et al. (2014), motivation and engagement are the main drivers for gamification in most studies. Thus, gamification is believed to make learning more captivating for students. For instance, the results showed by Sercanoğlu et al. (2021) regarding EFL high school students' response towards gamification by using the platform Kahoot! indicate favorable reactions concerning motivation, exam anxiety, and attitudes toward the course. Furthermore, gamification might "address transversal attitudes and behaviors such as collaboration, creativity, and self-guided study" (Caponetto et al., 2014, p. 55). However, Redjeki and Mujahir (2021) pointed out that gamification requires instructors to be well prepared and a learning environment that fulfills special requirements (i.e., internet connection, availability of technological devices, among others).

Problem Statement

One of the main concerns for instructors and teachers is finding ways to make learning more attractive for their students; then, many methods that focus on students' engagement and motivation have been developed over the years, and one of them is gamification (Surendelegh et al. 2014). Gamification has appeared to be a current trend in various fields like health, business, computer science, education, and foreign languages, among others (Caponetto et al., 2014; Groh, 2012). Thus, Redjeki and Muhajir (2021) pointed out that many academics and educators have turned their attention to gamification as a tool to enhance students' development of their English skills in EFL classrooms.

Along the same lines, various authors have conducted multiple research studies to find out the effects of gamification in EFL classrooms. To illustrate, Panmei and Waluyo (2023) conducted a study to investigate the outcomes of applying gamification when learning vocabulary using the application Quizizz outside the classroom. The results showed that statistically there was not a significant difference in the vocabulary score from the students in the control and experimental group (Panmei & Waluyo, 2023). Although there is an extensive body of research on gamification as it is a current matter, there is not yet a study that synthesizes all the effects that its usage has had in the learning process of the four macro skills (reading, writing, listening, and speaking) and systems (grammar and vocabulary) of the English language.

Owing to this fact, the purpose of this research synthesis is to compile the effects of the implementation of gamification in different EFL classrooms when developing students' English skills and systems.

Rationale

As previously mentioned, gamification is a topic that has gained popularity since 2010, and its growing recognition is thought to be due to its positive effects, including fostering motivation, changing behaviors, and promoting friendly competition and collaboration (Dicheva & Dichev, 2015). Caponetto et al. (2014) stated that gamification is an emerging trend in the educational context; thus, gamification's current popularity has led various researchers (Arunsirot, 2021; Hou, 2018; Redjeki, & Muhjahir, 2021) to conduct several empirical studies on its application in the EFL classroom as well as different qualitative studies focusing on students' and teachers' perceptions on the usage of a gamified approach in the learning process.

Regarding the data found in the EFL context, it mainly shows the effects of gamification when applied to develop English language skills and systems. In fact, most research in the line of gamification has shown results related to the increase in students' motivation, engagement, collaboration, and interaction in the classroom (Arunsirot, 2021; Caponetto et al., 2014). Nevertheless, despite the different available studies, a synthesis that compiles the effects gamification has had in the EFL classrooms was not found.

As a consequence, a research synthesis is an appropriate approach since its main purpose is to report the effects gamification has shown when applied to learning EFL. Then, this document can be helpful for teachers and instructors so that they can decide on whether to use or not gamification in their classrooms as well as when to use it.

Research Questions

- What are the reported effects of applying gamification in the EFL classroom for learning macro skills (reading, writing, listening, speaking)?
- What are the reported effects of applying gamification in the EFL classroom for learning systems (grammar and vocabulary)?
- What are the perceptions of teachers and students towards the use of gamification in the EFL classroom?

Objectives

General Objective

To examine the effects of the application of gamification in the EFL classroom.

Specific Objectives

- To report the effects of gamification on learning English macro skills (reading, writing, listening, and speaking).
- To report the effects of gamification on learning English systems (grammar and vocabulary).
- To analyze the perceptions of teachers and students towards the use of gamification in the EFL classroom.

CHAPTER II

Theoretical Framework

To understand the topic, certain concepts and definitions need to be covered in order to provide a supporting background to the study. This section will include information about gamification, gamification and its relationship with game-based learning, and the uses of gamification.

Definition of Gamification

Gamification is known as the implementation of game-based elements into non-game contexts to increase students' interest and improve their learning experience (Yavuz et al., 2020). It was mentioned that gamification consists of "the use of game elements to increase user experience and interest in non-game content" (Yavuz et al., 2020). In the same vein, Deterding et al. (2011) stated that gamification was a process of using the design of games in non-game environments. Among the contexts gamification takes place in, the most mentioned by researchers (Anderson et al., 2017; Arunsirot, 2021) is education. For instance, Anderson et al. (2017) conceptualized gamification as the implementation of games in educational settings. Moreover, Arunsirot (2021) claimed that gamification utilizes game mechanics by building up the use of different applications to motivate learners to solve problems, do various tasks, and apply their knowledge in real-life circumstances. Motivation is stimulated by means of points, levels, rewards, and achievements (Arunsirot, 2021).

Gamification vs Game-based learning

People commonly use the terms gamification and game-based learning (GBL) as synonyms; however, they are both differing approaches (Caponetto et al., 2014). Al-Azawi et al. (2016) stated that even though both concepts involve games, gamification has to do with the usage of game design elements, game mechanics, and game thinking in non-game practices to trigger motivation in the participants while GBL refers to the employment of games to foster students' participation in learning, making it more attractive and fun for learners.

Prensky (2001) introduced the term "digital natives" (p. 25) to refer to the new generations characterized by being born or growing up in the digital age. Most digital natives accustomed to "twitch speed, multitasking, random-access, graphics-first, active, connected, fun, fantasy, and quick payoff world of their video games, MTV, and Internet feel bored by most of today's approaches to training and learning" (Prensky, 2001, p. 25). Such cognitive abilities and changing needs are the reasons why digital game-based learning has emerged and evolved

as a learning approach (Prensky, 2001). With the background already stated, Camacho-Sanchez et al. (2023) defined game-based learning, also known as serious games, as the strategic use of games and video games in the classroom. Adjacent to this definition, Perrotta et al. (2013) conceptualized GBL “as a form of experiential engagement in which people learn by trial and error, by role-playing and by treating a certain topic not as ‘content’ but as a set of rules, or a system of choices and consequences” (p. 7). In addition, Al Fatta (2019) said that GBL is often referred to describe the application of sole games or video games with educational purposes, also called serious games, “as a one-period instructional occurrence to give formal learning within the classroom as well as online” (p.3). Or as Çeker and Özdamlı (2017) described, GBL is basically learning by playing. Resources like *World Peace Game*, *MinecraftEdu*, *Ten Frame Game*, and *3rd World Farmer* can be utilized in a GBL classroom (Figueroa, 2016).

On the other hand, gamification is a more recent concept than GBL, and it is defined as the usage of “‘elements’ derived from video-game design, which are then deployed in a variety of contexts, rather than about using individual video games” (Perrotta et al., 2014, p. 5). It differs from game-based learning in the sense that gamification involves “turning the learning process as a whole into a game” (Al-Azawi et al., 2016, p. 134). Authors emphasize that the process of gamifying learning (or any other area) involves the use of game design elements (Al-Azawi et al., 2016; Al Fatta, 2019; Arunsirot, 2021; Camacho-Sanchez et al., 2023; Yavuz et al., 2020). According to Deterding et al. (2011), some game elements were not only found in games, and not all games had such elements, so they classified them into five levels 1) game interfaces design patterns like badges, leaderboards, and levels; 2) game design patterns and mechanics (e.g.: time constraint, limited resources, turns); 3) game design principles and heuristics (e.g.: enduring play, clear goals, variety of game styles); 4) game models like Mechanics-Dynamics-Aesthetics (MDA), Core Elements of the Gaming Experience (CEGE), etc.; 5) game design methods like playtesting, or play-centric design. The same authors asserted that gamified applications encompass some of these elements, but they are not “proper games” (Deterding et al., 2011, p. 12). Some digital resources that use game elements and might be used in gamified lessons are *Class Dojo*, *Duolingo*, *Edmodo*, and *Socrative* (Figueroa, 2016).

Both game-based learning and gamification are approaches that have been developed to enhance students’ engagement and motivation, especially in the 21st century (Figueroa, 2016). Although there are some differences between concepts, according to Kapp (2012), “when you get right down to it, the goals of both are relatively the same. Serious games and gamification both are trying to solve a problem, motivate, promote learning, and using [use]

game-based thinking and techniques” (p. 12). Besides both approaches require proper knowledge when implementing them in the classroom whether it is to create games (GBL) or to gamify lessons (Figueroa, 2016).

Uses of Gamification

Gamification is a term that is not only used in educational settings but also in sectors like “business, organizational management, in-service training, health, and social policy” (Caponetto et al., 2014, p. 50). The same author stated that gamification is utilized in the mentioned settings as it helps to foster paramount characteristics such as schooling, workers’ functionality, clients’ engagement, and crowdsourcing practices (Caponetto et al., 2014). It is important to clarify that in this section, the terms application, app, and software will be used as synonyms, which is supported by Bernard (1962), who stated that everything provided by a device other than hardware is software.

To begin with, in health settings, gamification has been used on different occasions as Korn and Schmidt (2015) stated. They claimed that healthcare is similar to education since it is also a matter of repeated exercises, which leads to achievement; therefore, motivation and tolerance to repetitive practices are also needed. Korn and Schmidt (2015) described various examples of gamification in healthcare. In 2007, HopeLab created *Re-Mission*, a medical application where infants with cancer fight against virtual tumor cells, which significantly helped children’s medication intake. Another example of gamifying health was an app called *VI-Bowling*, which helped visually impaired people increase their throwing skills. Elderly people were also part of gamification for health; *SilverPromenade* is a software that simulates walks so that users go on virtual walks. Plus, in 2010 Wii developed an application named *motivation60+* that helped prevent the elderly population from falling through the use of gamified exercises on balance and strength. Finally, *Break the Bricks* is also another example; it is used to help stroke patients recoup their psychomotor abilities (Korn & Schmidt, 2015).

Conversely, gamification has been in hand with the business field since the year 1972 with programs like *the flyer program*, which gave rewards seen as bonuses to awarded members as Korn and Schmidt (2015) stated. Years after, other ways of gamifying were also used.

The 1990s–2000s American management trend of “fun at work” proposed reimagining the workplace as a fun and playful locale rather than one of work and drudgery, recapturing some of what was seen as an intrinsic, child-like play; in practice, this trend included many game-like elements (though not all play and fun is made up of game mechanics). (Nelson, 2012, p. 1)

The business area used gamification as a means of fostering motivation within employees so that they perform better and receive rewards once they fulfill the target objective (Korn & Schmidt, 2015). It can be also used in areas such as customer service to help superiors manage staff performance as Castellani et al. (2013) mentioned. Castellani et al. (2013) described a secret social system that was developed by PlayVox, which was used to easily diagnose the performance of the service customer staff and detect the missing but important components of the attention to customers.

Finally, gamification is mostly used in education as a means to support the learning process in different educational settings and subjects as well as fostering behaviors like teamwork, autonomous learning, and creativeness as Caponetto et al. (2014) declared. Caponetto et al. (2014) showed that gamification could be used at different educational levels like primary school, lower and upper secondary school, and university. Dicheva et al. (2015) demonstrated subjects, which use gamification as part of their teaching process like “Computer Science (CS) /Information Technology (IT), game programming, math/science/engineering, and subject neutral” (p.8). The subjects that use gamification mostly are CS and IT due to the need for certain technological infrastructure and help (Dicheva et al., 2015). Gamification is a current matter in EFL learning contexts (Caponetto et al., 2014). According to several authors, gamification in EFL classrooms has been used to teach the four major macro skills: reading, writing, speaking, and listening (Ahmed, 2021; Kaban, 2021; Rosyidah et al., 2023; Sukarya et al., 2022; Vathanalaoha, 2022; Yaghoobi & Kazemi, 2023; Yavuz et al., 2020) and the two systems: vocabulary and grammar (Ardi & Rianita, 2022; Arunsirot, 2021; Fithriani, 2021; Panmei & Waluyo, 2023; Redjeki & Muhajir, 2021). In fact, gamification has gained popularity among educators because of its influence on motivation and engagement, making them its main benefits when applied in learning environments (Caponetto et al., 2014).

To review, gamification is a term that is used in different contexts, and even in education, it is not limited to only one subject or instructional level (Caponetto et al., 2014; Dicheva et al., 2015). Gamification is also used in business settings as a means to engage employees and customers, and as an instrument to help evaluate workers' performance (Castellani et al., 2013; Korn and Schmidt, 2015; Nelson, 2012). Furthermore, gamification is involved in healthcare settings as a method to help multiple groups of patients like infants with cancer, partially or completely blind individuals, and elders (Korn & Schmidt, 2015).

Literature Review

Gamification as a current trend in education has been a topic of interest in the language learning field due to the increasing necessity of humanizing the learning process by fostering

students' motivation and engagement in the classroom (Arunsirot, 2021; Sercanoğlu et al., 2021). Thus, gamification is a resource used to enhance both skills and systems. According to Caponetto et al. (2014), gamification as part of the educational context can drive students toward the development of creativity, collaboration, and autonomous learning.

The literature that has supported this research synthesis has been divided into four categories: first, the effects of gamification on learning macro skills (reading, writing, listening, and speaking); second, the effects of gamification on learning systems (grammar and vocabulary); third, students' and teachers' perceptions of gamification. Several studies have focused on the usage of gamification in the EFL classroom and have reported its outcomes (Ahmed, 2021; Ardi, 2022; Arunsirot, 2021; Fithriani, 2021; Hou, 2018; Jiménez-Sánchez & Gargallo-Camarillas, 2020; Kaban, 2021; Laffey, 2022; Panmei & Waluyo, 2023; Phuong, 2020; Putra & Priyatmojo, 2021; Redjeki & Muhajir, 2021; Rosyidah et al. 2023; Sa'aleek & Baniabdelrahman, 2020; Sercanoğlu et al. 2021; Sukarya et al., 2022; Thủy & Hung, 2021; Vallejo, 2018; Vathanalaoha, 2022; Yaghoobi & Kazemi, 2023; Yavuz et al., 2020).

Effects of Gamification on Learning Macro Skills (Reading, Writing, Listening, Speaking)

In the first place, several researchers have studied how the implementation of digital gamified apps or websites in the classroom has changed students' reading comprehension, writing anxiety, listening performance, and speaking fluency and accuracy (Ahmed, 2021; Laffey, 2022; Kaban, 2021; Rosyidah et al., 2023; Sa'aleek & Baniabdelrahman, 2020; Sukarya et al., 2022; Vathanalaoha, 2022; Yaghoobi & Kazemi, 2023; Yavuz et al., 2020). Therefore, this section shows the reported results of different studies focused on the enhancement of the four macro skills in EFL classrooms by implementing gamification.

Sa'aleek and Baniabdelrahman (2020) investigated the outcome of using gamification for eight weeks on Jordanian EFL sixth-grade learners' reading comprehension. The study involved 71 male EFL students at a public school (Al Idressi Secondary School for Boys) divided into control and experimental groups, which consisted of 36 and 35 students respectively. After using *ClassDojo Website* with 35 learners, the researchers found that students in the experimental group achieved better results in the overall reading comprehension post-test and in each reading comprehension category (literal, inferential, and critical level). Similar results were shown by Kaban (2021), who studied the effects of gamification on 72 Turkish sixth-grade students' reading comprehension. The study encompassed the use of gamified e-books in two experimental groups (one group using linear and the other using non-linear reading) and printed books in a control group (each group consisting of 24 students). Although all

students improved their reading comprehension skills after four weeks, the results showed that both experimental groups performed better in the post-test, with the gamified non-linear reading group scoring the highest. In addition, the results showed that students liked electronic books in class but preferred printed books when reading for pleasure.

Plus, both studies showed that gamification helped students change their attitudes toward reading. It was stated that “when students use digital platforms to read, their attitude might change towards positive especially when reading for academic purposes” (Kaban, 2021, p. 84); thus, through the application of gamification “classes of reading comprehension were full of excitement and joyfulness” (Sa’aleek & Baniabdelrahman, 2020, p. 9).

Regarding writing, Yavuz et al. (2020) studied the effects of the process-based approach using gamification to reduce students’ writing anxiety in EFL learning. The study encompassed the participation of 47 undergraduate university students in Turkey, who were randomly divided into a control group that used traditional paper-based assignments and an experimental group that used *Edmodo* for their writing tasks. Yavuz et al. (2020) concluded that the process-based approach helped students decrease their anxiety levels, but the implementation of *Edmodo* reduced anxiety even more in the experimental group. On the other hand, Laffey (2022) studied the results of applying gamification to increase students’ writing motivation in a group of 120 undergraduate Korean students. He concluded that gamification appeared to improve students’ intrinsic and extrinsic motivation, and both groups’ performance improved, but there was no significant difference between them. Therefore, gamification can be used as a tool to enhance students’ motivation when it is low, but when referring to teaching actual content, educators need to evaluate how effective their strategies and tools are (Laffey, 2022).

Gamification has also been tested in regard to listening performance. For instance, Rosyidah et al. (2023) conducted a study to identify the effects of the use of *Duolingo* in the listening performance of two junior high school classes in Indonesia, one of them being the control group and the other, the experimental group (63 students in total). The researchers found that the usage of *Duolingo App* in the experimental group resulted in better listening performance and even higher commitment to fulfill the different activities than the control group. Likewise, Sukarya et al. (2022) researched nine-grade Indonesian students’ experiences on a *Duolingo-Assisted Listening Program* by analyzing both quantitative (30 participants) and qualitative (four participants) data. At the beginning of the study, 62% of the participants stated that listening was challenging, but after their experience with *Duolingo*, most learners felt more encouraged and understanding of listening since “students seem to find Duolingo to be a user-

friendly, practical, and enjoyable app to practice their English when it is integrated into the language classroom environment” (Sukarya et al., 2022, p. 3945).

Concerning speaking, Yaghoobi and Kazemi (2023) guided a study consisting of 40 non-random pre-intermediate Iranian EFL learners, divided into a control group and an experimental group (20 participants each). After 15 sessions of 90 minutes each, using *BigBlueButton*, the researchers concluded that speech fluency and accuracy were substantially enhanced in the experimental group, though there was no significant difference between both aspects. Thus, Yaghoobi and Kazemi (2023) recommend the incorporation of new technologies and online-based activities in the classroom and syllabus to enhance speaking skills with the condition that both instructors and learners are fully aware of how to utilize them. This is similar to what Ahmed (2021) found out when researching the effectiveness of a gamification program to enhance speaking skills in 50 first-year secondary-stage Egyptian students. Ahmed (2021) concluded that gamification helped to improve speaking performance since the post-test outcomes of the experimental group outperformed the control group’s results and their own pre-test scores.

Nevertheless, a study conducted in Thailand by Vathanalaoha (2022) to explore the impact of gamification on learning English with the implementation of *Winner English* in nine-grade students (1.022 in total) of eight schools, with the participation of other eight schools as the control group (534 nine-grade students) identified some problems regarding the effectiveness of gamification enhancing speaking abilities. Although the overall results were satisfactory, some students pointed out that “they could not tell whether their pronunciation was accurate or intelligible since there were no concrete scores validated for the speaking practices” (Vathanalaoha, 2022, p. 850). Also, the researcher exhorted the fact that the online program covered only fluency and accuracy, which led to the need for interaction in the classroom (Vathanalaoha, 2022).

Overall, the implementation of gamification has shown positive results in the reinforcement of the four macro skills, improving both performance and attitudes in most cases; however, there are some issues to be addressed, like the need for trained facilitators and the requirement of digital tools, which can create obstacles for the equal development of gamified learning activities in the classroom (Kaban, 2021; Laffey, 2022; Vathanalaoha, 2022).

Effects of Gamification on Learning Systems (Grammar and Vocabulary)

As with skills, researchers have studied how the use of gamification has affected foreign students’ learning of English syntactic and lexical systems (Ardi & Rianita, 2022; Arunsitot,

2021; Fithriani, 2021; Panmei & Waluyo, 2023; Redjeki & Muhajir, 2021). Hence, this section will explore the reported outcomes of learning grammar and vocabulary by implementing gamification tools.

Redjeki and Muhajir (2021) conducted an action research study to investigate how the implementation of *Duolingo* influenced 15 female Indonesian second-semester students to achieve their grammar goals in the subject *Grammar for Written Discourse*. The data was collected for 4 days, and all participants exhibited different levels of mastery of grammatical skills (low, medium, and high). After the usage of *Duolingo* to practice grammar for 15 minutes a day, researchers reported a rise in motivation and autonomy from students, which led to the usage of *Duolingo* exercises as additional homework. Moreover, the results of the survey showed that students enjoyed using the app since it was “fun, quite interesting, simple, modern, and easy to use” (Redjeki & Muhajir, 2021, p. 77). This is consistent with the investigation of Sukarya et al. (2022) who reported that participants found *Duolingo* to be user-friendly and enjoyable. *Kahoot!* has also been used for learning grammar. Ardi and Rianita (2022) conducted research involving 22 Indonesian pre-service EFL teachers taking the course *Grammar III*. Through the use of observations, interviews, and reflective journals, the investigators concluded that *Kahoot!* fostered the students’ urge to understand the topics and materials, ask questions, pay attention to the lecturer’s explanations, and ask for help before and after the game, which indicated that students felt motivated to perform better. Additionally, students could focus on one task at a time because of the app design, and they could enhance their skills for working under pressure as instructors can set a time limit in *Kahoot!* quizzes. In addition, the music included in the game was seen as a promoter of competitiveness and engagement; its team-mode feature allowed students to work in teams; and the reward system and final ranking pushed students to make an effort to get the first place (Ardi & Rianita, 2022). The results of both studies are similar even though the websites and methods used were different; students felt more motivated and engaged to learn grammar (Ardi & Rianita, 2022; Redjeki & Muhajir, 2021).

Arunsirot (2021) focused on syntax performance and not only motivation, leading a study that encompassed the participation of 64 English major students divided into a control and experimental group. The process was divided into a quantitative stage to measure syntactic knowledge and a qualitative stage to collect students’ opinions regarding the use of *Classcraft* as a gamification tool in an Indonesian EFL classroom. The post-test mean score of the experimental group was significantly higher than the control group’s mean score, and participants reported positive attitudes toward gamification, referring to it as a fun, interesting, and motivating tool in the classroom (Arunsirot, 2021).

Vocabulary can also be taught using gamification tools. For instance, Fithriani (2021) conducted research with 74 Indonesian freshmen university students, who participated voluntarily and were randomly assigned into a control and experimental group. After the experimental group used *Quizlet* for vocabulary learning during seven classes, the data collected showed that the implementation of Mobile-assisted Gamification (MAG) was effective in increasing students' vocabulary knowledge and recalling prior knowledge. Furthermore, participants reported that the use of *Quizlet* fostered a "more enjoyable learning environment" and "motivation enhancement" (Fithriani, 2021, p. 158). Similarly, Panmei and Waluyo (2023) aimed to investigate the impact of gamified vocabulary learning by using the platform *Quizizz* to apply online vocabulary quizzes in four weeks. The study involved the participation of 100 Thai university students who took part in General English (GE) courses grouped into a control and experimental group (50 participants each). Nevertheless, the outcomes of this study showed that the vocabulary knowledge of both groups did not vary significantly; therefore, "the gamification integration would not result in different achievements between those who received *Quizizz* support and those who did not" (Panmei & Waluyo, 2023, p. 15). Panmei and Waluyo (2023) pointed out that although the performance did not vary as expected, the non-specifically designed gamification instrument applied (*Quizizz*) did motivate students to use it more frequently and enjoy learning; thus, they suggested that gamified quizzes might be considered a strategy to enhance vocabulary practice. This lines up with the conclusions of Laffey (2022) who stated that even though gamification tools do not directly affect students' performance, they foster students' active participation and engagement.

Altogether, gamification has proved to be effective for grammar and vocabulary learning because of different app features like visuals and user-friendly interfaces that could enhance both motivation and learning enjoyment (Ardi & Rianita, 2022; Arunsirrot, 2021; Fithriani, 2021; Redjeki & Muhajir, 2021). However, results varied, and performance was not always significantly higher when gamification tools were used; hence, the implementation of gamified tools does not always equal better performance (Laffey, 2022; Panmei & Waluyo, 2023).

Students' and Teachers' Perceptions of Gamification

Students and teachers are the main characters in a classroom; therefore, they are the most accurate people to criticize gamification. Indeed, their perceptions, either positive or negative, about gamification in the classrooms are paramount factors in different studies (Hou, 2018; Jiménez-Sánchez & Gargallo-Camarillas, 2020; Kaban, 2021; Phuong, 2020; Putra & Priyatmojo, 2021; Sercanoğlu et al., 2021; Sukarya et al., 2022; Thủy & Hung, 2021; Vallejo,

2018; Vathanalaoha, 2022). This section will exhibit the recorded viewpoints on gamification that teachers and students have.

Vallejo (2018) conducted a four-month-long study to show the students' perceptions of gamifying the EFL classroom. The study involved the participation of 85 individuals (52 women and 33 men) with a range of ages between 16 to 54 years. He reported a wide assortment of positive perceptions, such as enjoying the class, fostering friendly environments for learning, promoting interpersonal relationships among peers, working collaboratively, and reducing anxiety levels. The study conducted by Sercanoğlu et al. (2021), which involved 88 male ninth-grade vocational high school students who were divided into an experimental group and a control group (44 participants each) reported similar results concerning fun and positive features of gamifying the classroom by using the platform *Kahoot!* with the experimental group. The research was quite different in the number of participants and their ages, but the results were pretty similar; some key findings were related to "the following codes: funny, providing effective learning, offering equal opportunities, remembering in the exam, usefulness, providing permanent learning, and creating a competitive environment" (Sercanoğlu et al., 2021, p. 694). Compared to the previous study, Sercanoğlu et al. (2021) found that anxiety did not significantly decrease, unlike Vallejo reported, but the outcome as a decrease was found in both studies.

Along the same lines, Phuong (2020) researched the attitudes students have toward gamified learning. Phuong's study was conducted with 147 Vietnamese students at a private technology university, making use of questionnaires and a focus group with 12 participants. This study reported some students' positive perceptions towards the use of gamification tools like *Kahoot!*, *Quizizz*, and *Quizlet*, viewing them as fun, interesting, and motivating. Moreover, Jiménez-Sánchez and Gargallo-Camarillas (2020) conducted a study that aimed to figure out the effects gamification has on students' intrinsic and extrinsic motivation. This study involved 51 high school students in Spain (28 females and 23 males), which were divided into a control and experimental group of 24 and 25 students respectively (Jiménez-Sánchez & Gargallo-Camarillas, 2020). After the use of the app *Quizizz* and the collection of data through questionnaires, the study brought forward higher levels of both intrinsic and extrinsic motivation in students who used the app, positive perceptions towards the app, and a green light for implementing the app in the learning context. Hou (2018) also led a study about motivation with 130 college students in Taiwan who had to use *Kahoot!* for learning English. For collecting data, the participants fulfilled a seven-point scale survey at the beginning of the semester (pre-test) and at the end of it (post-test). The survey showed that the use of the app

significantly increased students' motivation to learn English, especially in females (Hou, 2018).

Furthermore, teachers' perceptions were also a factor to study. Thủy and Hung (2021) conducted a study with 69 Vietnamese teachers, who worked in four different language centers and taught English to young learners. The purpose of the study was to figure out teachers' perceptions of the benefits and challenges when using gamification for teaching speaking skills. Through questionnaires and semi-structured interviews, Thủy and Hung (2021) concluded that teachers found gamification as a helpful instrument as it increased pronunciation awareness, student engagement and motivation, and learners' autonomy and confidence. Plus, gamification apps allowed ease when giving feedback to students since teachers could comment on students' videos and recordings or use the rewards and/or rank students to know who did well and who did not (Thủy & Hung, 2021).

Nevertheless, gamification also has some challenges. For instance, Kaban (2021) announced that after developing a study with the use of gamified e-books, students still preferred printed books, especially for reading for pleasure, since they could comprehend better the text and remember more details. Along the same line, Putra and Priyatmojo (2021) developed a descriptive qualitative study on students' perceptions of gamification in English class; the research sample was a group of 30 students who used *Kahoot* and *Quizizz* platforms in class. Based on questionnaires and interviews, Putra and Priyatmojo (2021) exhibited some students' negative perceptions of gamification, referring to it as unnecessary, noisy, boring when applied for a long time, demotivating when getting a low score, and distracting from the core of the lesson, which leads to a lack of understanding. This aligns with the findings of Phuong (2020) who reported that some students considered that leaderboards were also demotivating and made them want to "quit the game in the middle" (Phuong, 2020, p. 247).

Additionally, Thủy and Hung (2021) also claimed that teachers have negative insights on gamification. Teachers mainly mentioned that they do not feel prepared enough to use gamification apps or to manipulate computers, and such apps can cause difficulty or confusion, making them uncomfortable and unconfident. Phuong (2020) also mentioned that the lack of teachers' knowledge regarding gamification as a methodology could limit its uses and effectiveness in teaching and learning practices. Another paramount factor teachers mentioned was the idea that effective gamification apps' usage was limited to the early stages of the lesson (Thủy & Hung, 2021). Besides, giving feedback was not a task that teachers would let gamification do. According to Thủy and Hung (2021), teachers preferred to use direct feedback or grades instead of using the apps' scoring. Moreover, Kaban (2021) mentioned

some teachers' negative perceptions regarding e-books. For instance, teachers preferred to own and read printed books over e-books as they could underline with colors the important parts, take notes on them, feel the texture of the book, and turn the pages. Not to mention, students and teachers expressed that gamification could be blocked by internet connection problems and the need for extra devices, like wearing a headset for speaking practice, for example (Sukarya et al., 2022; Vathanalaoha, 2022).

Students' and teachers' perceptions of gamification vary depending on different factors. Gamification tools have proved to increase motivation, learning autonomy, and engagement as well as allow ease for fulfilling some teachers' tasks (Hou, 2018; Jiménez-Sánchez & Gargallo-Camarillas, 2020; Phuong, 2020; Thủy & Hung, 2021; Vallejo, 2018). However, researchers explained that internet connection problems might be obstacles (Sukarya et al., 2022; Vathanalaoha, 2022), some game elements could be demotivating (Phoung 2020; Putra and Priyatmojo, 2021), and appropriate training is needed for teachers (Phoung 2020; Thủy & Hung, 2021).

CHAPTER III

Methodology

This study is a research synthesis, which has been defined as a systematic understanding of a given topic based on the available information across primary research studies which aims to integrate the obtained data (Norris & Ortega, 2006). To ensure the required data about the effects of gamification in EFL classrooms was reliable, the articles were searched in academic databases such as Scholar Google, Mendeley, and Scielo. Furthermore, the key terms and their combinations that were used to find the appropriate research sources were the following: Gamification, Effects of Gamification, Gamification in EFL Classrooms, and Effects of Gamification on the EFL Context.

For selecting accurate studies for the research synthesis, a set of criteria had to be followed. First, the research methods to be considered could be qualitative, quantitative, or mixed-methods studies with no design restrictions. Second, all the articles were virtually searched because of the ease of access and availability. Third, the studies had to be published within the last 10 years (i.e., 2013-2023) as gamification is a current trend in education. Fourth, the research data was empirical to collect authentic and trustworthy outcomes of the implementation of gamification. Fifth, all the studies needed to be written in English since the research focus is EFL learning using gamification. Sixth, the collected sources had to be based on the results of applying gamification in EFL contexts. Finally, the age range of the participants involved in the different studies did not have any restriction to evidence an extensive compilation of outcomes including all possible learners.

The following journals were used to find information on gamification: *JEES (Journal of English Educators Society)*, *International Journal of Emerging Technologies in Learning (IJET)*, *Journal of English Educators Society*, *Journal of Computer and Education Research*, and *Journal on Educational Technology: Current Issues*. These were considered paramount and reliable sources to find information that could promote the achievement of this research synthesis's goal. Ultimately, the analysis procedure encompassed the categorization of studies according to the reported gamification effects on the different English skills (reading, writing, listening, and speaking), systems (grammar and vocabulary), and students' and teachers' positive and negative perceptions on gamification.

CHAPTER IV

Results and Discussion

In this chapter, an in-depth analysis is conducted on the outcomes of 21 chosen studies that are relevant for this research synthesis. To address the first and second questions of this study, the effects of gamification on learning skills and systems are identified and analyzed first. Then, the perceptions students and teachers have had after implementing gamification in EFL classrooms are analyzed and classified into positive and negative to answer the third research question related to advantages and disadvantages and perceptions respectively.

Effects of Gamification on Learning Skills

This category analyzes the reported effects that the implementation of gamification has had on learning macro skills. For this category, nine studies were chosen since they explore gamification's outcomes when learning reading, writing, listening, and speaking.

Table 1***Effects of gamification on learning macro skills (reading, writing, listening, speaking)***

Skills	Effects	N° of Studies	Author/Year
Reading	Better reading comprehension	2	Kaban (2021); Sa'aleek and Baniabdelrahman (2020)
	Positive attitudes towards reading	2	*Kaban (2021); *Sa'aleek and Baniabdelrahman (2020)
Writing	Less writing anxiety	1	Yavuz et al. (2020)
	Increased writing motivation	1	Laffey (2022)
	No significant improvement in writing performance	1	*Laffey (2022)

Listening	Better listening performance	2	Rosyidah et al. (2023); Sukarya et al. (2022)
	High commitment to complete activities	1	*Rosyidah et al. (2023)
	Positive attitudes toward listening	1	*Sukarya et al. (2022)
Speaking	Enhanced speaking skills (fluency and accuracy)	3	Ahmed (2021); Vathanalaoha (2022); Yaghoobi and Kazemi (2023)
	Higher motivation and engagement	3	*Ahmed (2021); *Vathanalaoha (2022); *Yaghoobi and Kazemi, (2023)
	Need for interaction	3	*Ahmed (2021); *Vathanalaoha, (2022); *Yaghoobi and Kazemi, (2023)

N=9

* Studies are counted in more than one category.

Table 1 shows the effects of gamification on EFL students learning the four macro skills (reading, writing, listening, and speaking). According to the analysis, reading comprehension and attitudes towards it are positively affected by the usage of gamification in the EFL classroom. Researchers found that reading comprehension at different levels (literal, inferential, and critical) can be enhanced using gamified tools, like e-books or the app *Class Dojo* (Kaban, 2021; Sa'aleek & Baniabdelrahman, 2020) to appeal to students' interests. Therefore, not only is reading performance improved but attitudes towards reading and reading activities turn more positive on students. According to Sa'aleek and Baniabdelrahman (2020), gamification was essential in "inspiring them to attend the class with greater desire and longing, as well as focus on useful educational tasks" (p. 8). However, researchers exhort the fact that the positive results were not only the outcome of students being more motivated to learn, but the program itself was solely focused on enhancing reading sub-skills (Sa'aleek & Baniabdelrahman, 2020). Besides, the texts should also appeal to students' likes as Kaban (2021) suggested after obtaining positive results, both qualitative and quantitative, by using

online storybooks. Thus, both the content taught or read, and the tools used should serve the learning objective and students' needs to increase the chances of learners' improvement.

Regarding writing, the analyzed data suggests that performance was not significantly improved; however, gamification allowed students to feel more motivated and have less anxiety when writing. Laffey (2022) suggested that gamification may be beneficial when working with unmotivated students since it has been shown to enhance both intrinsic and extrinsic motivation by increasing enjoyment and purpose (i.e., students' perception of writing's real-world advantages). Yavuz et al. (2020) focused on students' writing anxiety and concluded that it can be lowered by choosing the appropriate tools and methods, being the use of gamified apps that proved successful. Nevertheless, researchers encourage educators to put effort into making writing more enjoyable by using different methods and instruments since both impact learners' outcomes. To illustrate, Yavuz et al. (2020) used gamified tools and a process-based approach, both helping students feel more confident and motivated when completing their writing tasks. Researchers also warn about the small benefits that gamification may bring regarding language learning and recommend critical analysis when choosing instruments and methodologies (depending on the effort they require and the classroom outcomes) and the use of available digital tools for writing instruction (Laffey, 2022; Yavuz et al., 2020).

In terms of listening, the analyzed data shows that the application of gamification through *Duolingo* can increase performance and commitment and change attitudes positively toward listening. The study of Rosyidah et al. (2023) suggested that there is a direct relationship between the change in attitudes and students' listening performance. For instance, the use of the app helped students become more familiar with English learning and increased their motivation to complete the tasks, which aided in enhancing learners' listening performance (Rosyidah et al., 2023). Demotivation can be caused by students' perceptions or misconceptions; if listening is considered a challenging skill, it can be more difficult to engage and motivate students. As Sukarya et al. (2022) demonstrated, when students changed their attitudes and perceived listening to be fun, they paid more attention and felt more enthusiastic to practice and learn, even outside the classroom. Thus, *Duolingo* is suggested as "an engaging medium to utilize in the teaching-learning process" (p. 3945), which might not only increase listening comprehension but also help students practice grammar and vocabulary altogether (Sukarya et al., 2022).

The last analyzed skill is speaking, and data shows that fluency and accuracy can be improved by using gamified applications as well as learners' motivation and engagement. Since

speaking is built around constant practice, learners' speaking performance was enhanced using gamified applications due to the wide variety of speaking exercises they provided (Ahmed, 2021; Yaghoobi & Kazemi, 2023). Gamification also increased students' motivation to speak and practice a foreign language. Vathanalaoha (2022) explained that the similarities of the apps' game designs (coins, points, rewards, and challenges) with the ones of video games appealed to the learners' interests and helped create "goal-oriented lessons" (p. 851) that pushed students to fulfill their activities. In the same line, Yaghoobi and Kazemi (2023) claimed that the use of gamified activities keeps "learners interested, motivated, and involved all the time" and improves "students' ability to use the language effectively inside and outside of class" (p. 15). However, researchers pointed out that gamification has to be combined with collaborative work and interaction among peers to increase students' speaking abilities, especially when English is learned in a foreign context (Ahmed, 2021; Yaghoobi & Kazemi, 2023). As Vathanalaoha (2022) stated, little interaction with teachers or peers can be a limitation when enhancing speaking abilities, even more so when the used software does not provide interactive speaking exercises.

Effects of Gamification on Learning Systems

This section examines the announced effects that implementing gamification has had on learning English systems. For this category, five studies were taken into account as they explored gamification's results in learning grammar and vocabulary.

Table 2

<i>Effects of gamification on learning systems (grammar and vocabulary)</i>			
Systems	Effects on systems	Nº of Studies	Author/Year
Grammar	Better grammar performance	1	Arunsirot (2021)
	Active role	1	Ardi and Rianita (2022)
	Amusing	2	*Arunsirot (2021); Redjeki and Muhajir (2021)

	Engaging	2	*Ardi and Rianita (2022); *Arunsirot (2021)
	Motivating	2	Fithriani (2021); Panmei and Waluyo (2023)
Vocabulary	Vocabulary increase	1	*Fithriani (2021)
	No increase in vocabulary	1	*Panmei and Waluyo (2023)

N=5

* Studies are counted in more than one category.

Table 2 shows the effects gamification had on learning English systems. From this table, it is assumed that since gamification had mostly positive effects, an improvement can be seen in systems learning by using gamification. This conclusion can be drawn from the codes found in the table above. The first terms are related to gamification's effects on grammar learning, which will be the first system covered. One of the benefits has to do with better grammar performance. According to Arunsirot (2021), the group that used a gamified tool (*Classcraft*) to study grammar performed better in syntax than the group that did not. The second term encompasses students' active role in classes with the use of gamification. To illustrate, Ardi and Rianita's (2022) study showed that gamification stimulated students' desire to comprehend the topics, ask questions, and concentrate in class, which are some autonomous activities that make students active learners. Another positive effect has to do with students finding learning amusing. According to Redjeki and Muhajir (2021), the use of gamification for teaching makes the environment entertaining or even fun for learners. In the same line of effects on grammar, engagement is another key term. Based on some research done by Ardi and Rianita (2022) and Arunsirot (2021), gamified tools could engage students in class. To illustrate, Ardi and Rianita (2022) found out that the music on the gamification apps engages students in doing their tasks.

The next system involved is vocabulary in which three main codes were found. The first code is motivation. This code was found in two different studies (Fithriani, 2021; Panmei & Waluyo,

2023). Based on the mentioned authors, motivation for learning vocabulary had increased after the use of gamification in learning sessions. To illustrate, in the research done by Fithriani (2021), the use of gamification was perceived as a motivator since it made the learning process enjoyable and contributed to creating a pleasant classroom atmosphere. The next codes are related to performance on the mentioned system. On one hand, Fithriani (2021) found an increase in vocabulary while Panmei and Waluyo (2023) stated that there was no difference in the amount of vocabulary students learned with gamification. Hence, for these two authors, there is no difference between using and not using gamification for teaching vocabulary. However, they pointed out the significance of choosing the appropriate tools (gamified apps), which might have affected the results (Panmei & Waluyo, 2023).

Students' Perceptions of Gamification

This category analyzes the beliefs students had after using gamification. For this segment, seven studies were chosen because they report positive and negative characteristics ascribed to gamification by learners.

Table 3

<i>Students' perceptions of gamification</i>			
Students' perceptions		N° of Studies	Author/Year
Positive	Entertaining	3	Phuong (2020); Sercanoğlu et al. (2021); Vallejo (2018)
	Effective learning environment	2	*Sercanoğlu et al. (2021); *Vallejo (2018)
	Lower anxiety levels	2	*Sercanoğlu et al. (2021); *Vallejo (2018)
	Motivating	2	Hou (2018); Jiménez-Sánchez and Gargallo-Camarillas (2020)

Negative	Worthless	1	Putra and Priyatmojo (2021)
	Monotonous	2	Kaban (2021); *Putra and Priyatmojo (2021)
	Boisterous	1	*Putra and Priyatmojo (2021)
	Demotivating	2	*Phuong (2020); *Putra and Priyatmojo (2021)
	Distracting	1	*Putra and Priyatmojo (2021)

N=7

* Studies are counted in more than one category.

Table 3 shows the different perceptions students have about the use of gamification in EFL classrooms. Data demonstrates that the points of view students have about gamification are still in debate as there are divided opinions. On one hand, data indicates different positive comments, such as entertainment, as Phuong (2020), Sercanoğlu et al. (2021) and Vallejo (2018) stated in their research. Additionally, gamification serves to create effective learning environments according to what students said in the studies conducted by Sercanoğlu et al. (2021) and Vallejo (2018). For example, Sercanoğlu et al. (2021) reported that gamification provided permanent learning, and it also helped students remember things on exams. The two previously mentioned authors also claimed that gamification was a tool to help students lower their anxiety levels. Finally, students see the use of gamification as a motivator in the learning process (Hou, 2018; Jiménez-Sánchez & Gargallo-Camarillas, 2020). To illustrate, data demonstrated both types of motivation, intrinsic and extrinsic, had increased in students after the use of a gamified app, and they were in favor of applying this tool in the learning environment (Jiménez-Sánchez & Gargallo-Camarillas, 2020).

Nevertheless, other authors showed that students also have negative views on the use of gamification. From the table, it is noticeable that Putra and Priyatmojo (2021) are the main

researchers who pointed out the negative comments that students have about gamification. The first one is worthless; students did not find gamification as a necessary tool for them when learning (Putra & Priyatmojo, 2021). Monotonous is the next way of addressing gamification by some students (Kaban, 2021; Putra & Priyatmojo, 2021). For instance, students thought that using gamification for long periods became boring (Putra & Priyatmojo, 2021). Boisterous is the next view learners have on gamification; students mentioned that the use of gamification in class makes it chaotic and noisy (Putra & Priyatmojo, 2021). Furthermore, some students targeted gamification as demotivating (Phuong, 2020; Putra & Priyatmojo, 2021), which differs from how learners described gamification in other studies (Hou, 2018; Jiménez-Sánchez and Gargallo-Camarillas, 2020). For example, as said by Putra and Priyatmojo (2021), students claimed that they felt demotivated when they obtained a low score or appeared last in the rankings provided by the different apps. Finally, the visuals, music, and other features that gamified apps offer can become distracting for students according to Putra and Priyatmojo (2021). To exemplify, students stated that features of the gamified software caused them to lose the core of the lesson, which may lead to a lack of understanding (Putra & Priyatmojo, 2021).

Some points of view completely contrast with others; therefore, more research is needed to have clearer and more general results.

Teachers' Perceptions of Gamification

This category analyzes teachers' opinions after applying gamification in EFL classrooms. For this section, five studies were chosen since they describe positive and negative characteristics attributed to gamification by educators.

Table 4

<i>Teachers' perceptions of gamification</i>			
Teachers' perceptions		N° of Studies	Author/Year
Positive	Tool to enhance language skills	1	Thủy and Hung (2021)
	Task-reducing	1	*Thủy and Hung (2021)

	Promoter of students' self-management skills	1	*Thủy and Hung (2021)
Negative	Difficult to manipulate	2	Phoung (2020); *Thủy and Hung (2021)
	Limited usages	2	*Phoung (2020); *Thủy and Hung (2021)
	Not preferred over known tools and strategies	2	Kaban (2021); *Thủy and Hung (2021)
	Inhibited by technological deficiencies	2	Sukarya et al. (2022); Vathanalaoha (2022)

N=5

* Studies are counted in more than one category.

Table 4 shows the results according to teachers' perceptions of gamification. Data indicates that gamification has awakened positive insights among some educators (Thủy & Hung, 2021). In fact, gamification was considered a useful tool to enhance language skills. For example, some teachers perceived that students' pronunciation awareness increased with the use of gamified resources, as stated by Thủy and Hung (2021). In the line of positive perceptions, teachers regarded gamified apps as task-reducing instruments since they helped them ease procedures like scoring and providing feedback. Additionally, data shows that some instructors reckoned gamification as a promoter of students' self-management skills. For instance, it successfully increased students' motivation, engagement, autonomy, and confidence (Thủy & Hung, 2021).

On the other hand, data also shows negative opinions regarding the use of gamification in EFL classrooms (Kaban, 2021; Phoung, 2020; Sukarya et al., 2022; Thủy & Hung, 2021; Vathanalaoha, 2022). One of the reported issues is that some teachers believe that gamified apps are difficult to manipulate, which might be caused by a lack of training and familiarity with the approach and the resources (Thủy & Hung, 2021). As Phoung (2020) stated, educators "may need guidance to fully cultivate the potential of gamification in their teaching practices" (p. 248). Therefore, this lack of knowledge may result in gamification having limited usage in

the EFL classroom. For instance, according to teachers, gamified activities could be restricted to the early stages of the lesson to be more effective (Thủy & Hung, 2021). Data also exhibits that gamification is not preferred over known tools and strategies by some instructors. To illustrate, educators claimed to prefer providing feedback or grading themselves rather than relying on apps' scores (Thủy & Hung, 2021). Likewise, Kaban (2021) reported that teachers' select printed books over e-books because of the ease of underlining and jotting on them and the sensory experience printed books allow through touch. Finally, gamification can be inhibited by technological deficiencies, making it ineffective in determined situations or areas. Sukarya et al. (2022) and Vathanalaoha (2022) pointed out that the reliance of gamification on technology could cause functioning issues when the internet connection fails, a device is lacking, or extra accessories (headsets) are needed to fulfill the activities properly. Plus, most gamified tools lack certain features because of technology development. To illustrate, Vathanalaoha (2022) stated that even though fluency and accuracy were enhanced on students learning speaking skills, the used application did not have a communicative option, resulting in a lack of speaking interaction.

CHAPTER V

Conclusions

The main purpose of this research synthesis was to analyze the outcomes of implementing gamification in the EFL classroom. In order to organize the analyzed articles, the synthesis was intended to identify the reported effects of using gamification for learning skills and systems in EFL contexts and students' and teachers' perspectives after experiencing gamification. A conclusion for each research question will be drawn for a better understanding. The objectives of this research have been accomplished and the findings will be developed next.

To begin with, the first research question about the reported effects of applying gamification in the EFL classrooms for teaching macro skills was answered after analyzing nine studies. Based on the different data, gamification in EFL classrooms has mostly positive results when learning the four macro skills (reading, writing, listening, and speaking). The main effects that have been found have to do with students' motivation and engagement, performance, and attitudes.

As revealed by the analyzed studies, the main effect of the usage of gamification in the EFL classroom is the increase in motivation. Students showed to be more motivated and engaged to learn and practice writing, listening, and speaking. More motivated students proved to be more engaged with the taught content and committed to fulfilling provided activities, contributing to making them build an active role in the learning process (Ahmed, 2021; Laffey, 2022; Rosyidah et al., 2023; Vathanalaoha, 2022; Yaghoobi & Kazemi, 2023).

It was also found that gamification could significantly enhance learners' language performance when learning skills. Students' reading, listening, and speaking performance improved with the use of gamified resources (Ahmed, 2021; Kaban, 2021; Rosyidah et al., 2023; Sa'aleek & Baniabdelrahman, 2020; Sukarya et al., 2022; Vathanalaoha, 2022; Yaghoobi & Kazemi, 2023). However, the improvement was not constant in all the skills as for writing performance, studies did not reveal significant advances (Laffey, 2022). Hence, it is recommended that approaches, including gamification, are tested before using them to determine if the effort pays off enough benefits in a determined educational context (Laffey, 2022).

The last effect found when applying gamification in the EFL classroom was the positive change in students' attitudes toward learning. According to the analyzed data, students regarded reading, writing, and listening more positively as fun and less challenging (Kaban, 2021; Redjeki and Muhajir, 2021; Sa'aleek & Baniabdelrahman, 2020; Sukarya et al., 2022), and

even learners' anxiety showed a decrease with the implementation of gamification (Yavuz et al., 2020). The usage of gamified apps caused students to encounter enjoyment when learning, which could contribute to increasing their motivation and improving their performance (Rosyidah et al., 2023).

Regarding the second research about the reported effects of applying gamification in the EFL classrooms for learning systems, the analysis of five articles led to the conclusion that the outcomes are similar to those of skills in terms of motivation and engagement. However, academic performance was not uniformly improved in both systems.

Concerning the analyzed studies, motivation and engagement were the main effects reported by different authors (Ardi & Rianita, 2022; Arunsirot, 2021; Fithriani, 2021; Panmei & Waluyo, 2023). Students felt more motivated and enjoyed learning vocabulary and grammar when using gamified tools, which some students reported to be fun (Ardi & Rianita, 2022; Arunsirot, 2021; Redjeki & Muhajir, 2021). Additionally, engaged students showed more autonomy by revising the provided content and participating in the presented activities more actively (Ardi & Rianita, 2022).

Another effect of gamification when learning systems is an improvement in performance, though it is not consistent. Regarding grammar learning, students who learned through gamified applications, performed better (Arunsirot, 2021). Concerning vocabulary acquisition, it is more difficult to reach to a conclusion since studies showed opposite results. Fithriani (2021) stated that there was an increase in vocabulary; on the contrary, Panmei and Waluyo, (2023) reported that there was no enlargement in vocabulary. Therefore, academic results not only depend on the usage of a specific approach, gamification in this case, but it is a matter of several other factors like choosing the appropriate instruments or designing proper content materials (Panmei & Waluyo, 2023).

Finally, to answer the last research question about the perceptions of teachers and students toward the use of gamification in the EFL classroom, 11 studies were analyzed. Data shows that students' and teachers' perceptions about gamification are still controversial since both groups exhibit positive and negative insights.

On one side, teachers considered gamification a tool that could help increase language skills, promote students' autonomy, and reduce teachers' tasks (Thủy & Hung, 2021). However, they also considered that gamified apps were not user-friendly and viewed gamification as having limited uses, being deficient, and involving technological skills at which they were not prepared

enough, so they preferred well-known tools and strategies better (Kaban, 2021; Phoung, 2020; Sukarya et al., 2022; Thủy & Hung, 2021; Vathanalaoha, 2022).

On the other side, after using gamification, students perceived it as a means to motivate, lower anxiety, entertain, and create effective learning atmospheres (Hou, 2018; Jiménez-Sánchez and Gargallo-Camarillas, 2020; Phuong, 2020; Sercanoğlu et al., 2021; Vallejo, 2018). Nevertheless, some students also dismissed the use of gamified apps in the classroom as useless, repetitive, boring, demotivating, and distracting (Kaban, 2021; Phuong, 2020; Putra and Priyatmojo, 2021)

Based on all the reported perceptions that teachers and students have, it is evident that the insights can vary depending on different factors such as the educational setting, the participants, the gamified app used, the content taught, among others. Therefore, perceptions, whether positive or negative, are subjective and will depend on students' and teachers' individual and collective experiences.

Recommendations

After reviewing and analyzing the 21 selected studies, it has been noticed that there is not enough research in Latin America about the use of gamification. In fact, research in this area was not found; thus, the analysis did not include any Latin American study; hence, more research needs to be done to analyze the outcomes of implementing gamification in the region, and how students and teachers perceive the approach as EFL learners and educators respectively.

Moreover, there is a need for research on gamification applied with non-digital tools. Even though gamification appeals to a generation of digital natives who are surrounded and constantly interacting with technology (Figueroa, 2016), public education in the Ecuadorian context does not provide enough digital resources to apply digital gamification. Therefore, researching non-digital gamification can guide educators who want to use this approach in Ecuador and other Latin American countries.

Additionally, more research needs to be done to test gamification with students of different ages and educational levels. Since most analyzed studies were conducted in high schools and universities, it is necessary to have a better understanding of how gamification works with students who have different characteristics.

Finally, educational institutions should support and provide the required training for English teachers so that they can explore different approaches to teaching and find appropriate methods and instruments that appeal to students' interests and characteristics.

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Annexes

Annex A: List of Analyzed Articles

- Ahmed, S. (2021). A gamification program to enhance speaking skills of EFL secondary stage students and their motivation towards learning these skills a research. *Journal of The Faculty of Education- Mansoura University*, 116(3), 21–43. <https://doi.org/10.21608/maed.2021.235826>
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