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Engaging English as a Foreign Language (EFL) Students through the Game-Based Learning Approach in Higher Education

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Abstract. The present study aimed to implement the Game-Based Learning (GBL) approach through the use of technology to promote students' engagement in the English as a Foreign Language (EFL) classroom. The participants included 64 undergraduate and postgraduate students involved in two EFL study programmes. This research followed a mixed-method approach, which included the administration of an online diagnostic questionnaire, an observation checklist, an online perceptions questionnaire and a semi-structured interview. This research was carried out over 14 weeks in four different courses in which the game-based approach was implemented through the use of Quizizz. The results showed that the participants' perceptions of GBL were positive in all the stages of EFL lessons since learners were motivated, interested and had the opportunity to develop their linguistic and pedagogical skills.

Keywords: Game-Based learning approach; EFL students; engagement; higher education; Quizizz

1. Introduction

English has become increasingly important in the last decade, as it is a useful tool for effective communication in science, education and business. Being a lingua franca, mastering English can enhance communication skills with people worldwide (Jenkins, 2015). According to Alvarez and Guevara (2021), learning English is essential for obtaining professional scholarships and better job opportunities in Ecuador. It is now a required academic subject at all levels of education, including elementary, secondary and university. In this context, different approaches and methods have been used to teach English, in which instructors have incorporated the use of technology. To this respect, Brown and Lee (2014) manifest that as current students have been raised with digital technologies, they tend to seek innovative methods of learning. Hence, higher education instructors need to adopt alternative instructional approaches to facilitate student learning.

As per Rose's (2019) statement, it is crucial for EFL teachers in higher education to ensure that students possess the necessary competencies to acquire the target language and use English effectively in their future professional endeavours. Consequently, EFL educators should use different methods and strategies to help students succeed in the language learning process. In this regard, engaging learners to succeed is a crucial issue to develop their accomplishment in EFL language learning (Oga-Baldwin, 2019). One way to foster students' participation is engagement, which involves observable and unobservable aspects of learners' interactions with educational activities (Li & Lerner, 2013). In addition, according to Fredricks et al. (2019), learners' engagement is a multidimensional concept linked to several positive learning and life outcomes. Therefore, engagement is linked to academic performance and motivation (Barak et al., 2016). As Harmer (2007) affirms, teachers can promote learners' engagement by stimulating their curiosity, involvement, attention and emotion; thus, they will be prepared to start a new lesson.

In this context, to increase students' engagement, the implementation of the GBL approach is crucial to providing students with a sense of control, independent learning, and academic achievement (Kulpa, 2017; Noroozi et al., 2020). Moreover, GBL involves the use of game design to improve the educational setting and attain better learning outcomes (Lim & Lee, 2007; Shaffer et al., 2005). Games with educational purposes have long been acknowledged as a way to promote students' active learning. According to Selvi and Çosan (2018), games can encourage learners to take an active role in the classroom since they foster their critical thinking skills. In EFL teaching and learning, the implementation of the GBL approach creates a setting where the use of games improves the acquisition of all language skills, and it brings exciting learning experiences (Hitosugi et al., 2014; Kirriemuir & Farlane, 2004). Moreover, the GBL approach, according to Tang et al. (2009), uses information and communication technology (ICT) to create interactive and stimulating virtual learning environments. In this regard, the integration of GBL through technology offers EFL teachers the opportunity to design a variety of games by using tools such as Quizizz, which can be used to create interactive games that students can access on their electronic devices (Irwansyah & Izzati, 2021). Certainly, the use of games in the EFL classroom creates a motivating environment in which students can control their own learning process, which is a crucial aspect of foreign language acquisition (Cabrera-Solano, 2022).

Several studies have been carried out regarding the use of the GBL approach through Quizizz in EFL teaching. Munawir and Hasbi (2021) conducted research on the effectiveness of Quizizz to improve student engagement and learning outcomes in an EFL university setting. Quizizz had a positive impact on student engagement, motivation, understanding of the lesson and ease of learning topics. In addition, Irwansyah and Izzati (2021) analysed the use of Quizizz as a GBL and assessment tool in an EFL context. The outcomes showed that Quizizz motivated participants who were actively engaged in the lessons and showed good attitudes while using this tool. Moreover, Inayati and Waloyo (2022) analysed the level of learners' engagement and learning outcomes of Quizizz-online gamification on

English learning development in high schools. The findings revealed that gamification had a positive influence on learners' engagement, participation and discipline. Although there have been different studies related to the use of the game-based approach through Quizizz internationally, in our context, similar studies are scarce. Therefore, this research aims to address this gap by analysing the impact of GBL on learners' engagement during the didactic sequence of the different stages of a lesson. Therefore, our study would respond to the following research questions.

RQ1: What are the EFL students' attitudes towards the use of the Game-Based Learning approach for classroom engagement?

RQ2: What are the EFL students' perceptions about the use of the Game-Based Learning approach in the different stages of a lesson?

2. Literature Review

2.1 EFL Teaching in higher education

Globalisation and technology have shaped the landscape of higher education. Institutions are adapting to meet the demands of a globalised world by incorporating English language proficiency and embracing technology as a means to enhance teaching and learning (Martín del Pozo et al., 2017). These changes aim to equip students with the skills and competencies needed to succeed in an interconnected and technologically driven society (Falloon, 2020). Therefore, few people can deny that higher education has changed drastically over the course of the past decades. In this context, globalisation and student mobility have moved universities to include English in their curriculum as institutions try to meet the requirements of the global movement of education (Murray, 2016). Undoubtedly, in the current era of digital progression, the use of technology has become a popular phenomenon in higher education, which has led to engaging activities that promote reflection, communication, collaboration, sharing knowledge, and so forth (Kasuma, 2017). Moreover, according to Brown and Lee (2014), since new-generation students have grown up with digital technologies, they tend to seek new learning; therefore, instructors need to use alternative strategies to promote student learning in higher education institutions. Consequently, English language higher education teachers need to ensure that students have the requisite skills to learn the target language and to use English successfully in their future careers (Rose, 2019). According to Halverson et al. (2018), one alternative to reach such a goal could be by meeting the needs and expectations of university students who are greatly interested in online recreational activities such as games, videos and social networking, among others.

2.2 Students' Engagement in EFL Teaching

Engagement in EFL education has been explored from different perspectives as an approach to teaching the language. In this regard, it has been defined as being involved, committed, or attached to the academic and social activities of an institution (Li & Lerner, 2013). As Deci and Ryan (2000) affirm, engagement involves the learners' traits that can be seen and those that cannot in their interactions with educational activities. Nevertheless, engagement needs to be sustained by need fulfilment; therefore, the degree to which students experience

need satisfaction affects their interest in different activities. Certainly, Bomia et al. (1997) claim that engagement is related to learners' needs and willingness to involve themselves in the learning process, which can then lead to better achievement. In foreign language teaching, Oga-Baldwin (2019) acknowledges that engagement is a highly desirable prerequisite for learning. In this context, engagement can be considered the energy students spend toward their academic success; therefore, it constitutes one of the most critical aspects of learners' accomplishment when studying a foreign language. Likewise, Sadoughi and Hejazi (2021) state, "EFL teachers expect learners to be as highly engaged as possible in learning activities relating to the four main language skills (i.e., speaking, writing, listening, and reading) as well as sub-skills such as grammar and vocabulary" (p. 1).

2.3 Game-Based Learning Approach (GBL)

Educational games have been traditionally recognised as an effective approach to enhancing students' active learning. Researchers have indicated that using games can help students participate in their learning process and develop their critical thinking skills (Huizenga et al., 2009; Selvi & Çosan, 2018). In this context, the GBL approach involves the effective use of games to promote students' engagement in the classroom (Noroozi et al., 2020). In addition, GBL develops students' problem-solving skills by using interactive games (Ebner & Holzinger, 2007). In the context of EFL teaching, GBL constitutes an environment where the use of games enhances the acquisition of all language skills and fosters students' abilities to develop their critical thinking skills (Kirriemuir & Farlane, 2004). Reinhardt and Sykes (2012) state that the effective use of games has the potential to promote students' interactions in the EFL learning process. Furthermore, Hitosugi et al. (2014) assert that the implementation of games brings exciting learning experiences to EFL learners who can also develop their cognitive abilities and reduce their anxiety to learn the target language.

2.4 Implementation of the GBL approach through technology

The rapid development of ICT has revolutionised the way English is taught in the twenty-first century (Adnan et al., 2020). In this context, the potential of ICT brings several opportunities for EFL teachers to implement digital game-based instruction in the classroom. According to Vandercruysse et al. (2012), the use of games for instructional purposes provides different learning opportunities and increases students' motivation. In this regard, the implementation of games requires teachers to become familiar with technology, which means that they need to be creative enough to help students become critical thinkers (Qian & Clark, 2016). Considering the aforementioned aspects, EFL teachers can choose from a variety of ICT tools to integrate games into their lessons. For example, Quizizz, Genially, Kahoot and Socrative are some of the most recognised tools that allow the use of games to teach language skills; however, from all these recourses, Quizizz is considered a fun e-learning tool that has the potential to enhance learners' participation and motivation by implementing interactive games in the teaching and learning process (Dhamayanti, 2021).

2.5 Previous Studies

Anak and Hua (2021) carried out a quasi-experimental study to investigate the effects of Quizizz on Malaysian students' learning of irregular verbs in English. This study was conducted in a primary school in Padawan, Sarawak; the participants were 30 young learners. The researchers used a pre-test/post-test approach and analysed data through t-tests to explain the participants' performance. The findings revealed that the implementation of online games through Quizizz improved the pupils' learning of irregular past tense verbs. Therefore, game-based learning helped to enhance the participants' interest and learning of the English irregular past verbs.

Another study by Irwansyah and Izzati (2021) analysed the implementation of Quizizz as a GBL and assessment tool in the English classroom. This study was carried out in Indonesia during the COVID-19 pandemic. The participants included students from six classes. They used Quizizz for 20 minutes before finishing their lessons in which teachers obtained the score reports easily by using this tool. Students' perceptions of the use of Quizizz were inquired through a questionnaire. The results evidenced that the participants felt excited and motivated when playing Quizizz as a GBL and assessment tool. Also, they actively participated in the classes and displayed a positive attitude toward the use of such a tool.

Also, Inayati and Waloyo (2022) studied the level of learners' engagement and learning outcomes of Quizizz-online gamification on English learning development in junior high school. This study was conducted at a private high school in Batu City, Indonesia. The participants were 62 students in the 9th grade and an EFL teacher. To gather the information, researchers used observations, interviews, and students' test results. The descriptive and thematic analysis demonstrated that gamification positively influenced students' engagement, participation and discipline. However, students' learning outcomes did not show equal progress as their engagement level. Therefore, other approaches and methods that are more cognitively driven should ensure that the balance between learning outcomes and positive learning experiences is achieved.

Moreover, Munawir and Hasbi (2021) investigated the effectiveness of student engagement and learning outcomes after using the application Quizizz in an EFL university context. This research used a design that included a single group of participants at a single point in time in the explanatory form of quantitative research. The instruments to collect the data and information were a student engagement questionnaire, a Quizizz-based test, report documentation, an observation form and a learning outcomes questionnaire. The results revealed that Quizizz helped students to be more interested in the lesson and ambitious for success. Moreover, Quizizz permitted learners to work collaboratively and increased their motivation. On the other hand, a combination of a gamification approach with the learning method helped students to understand the lesson better. Finally, the competition allowed learners to improve their response to time management and made the learning topics easy to understand.

Another study by Pitoyo et al. (2020) aimed to explore the washback effect of the Quizizz assessment platform on students' learning. The participants were 18 university students in the third semester who took an English course. The sample was selected purposively and the instruments included questionnaires, observation checklists and in-depth interviews. The data obtained were analysed quantitatively and qualitatively. The results indicated that students were motivated and wanted to learn more deeply after doing several gamified tests with Quizizz. Learners were interested in elements of the game such as the Leaderboard, Meme, Time restriction and Test report. Finally, Web-based gamification with Quizizz for assessment had a positive impact on students' learning.

3. Method

3.1. Setting and participants

The participants in this study were 64 male and female EFL learners whose ages ranged from 20 to 45 years old. The students participated in face-to-face and distance English language courses and were enrolled in two EFL teaching undergraduate and postgraduate study programmes offered at a private university in the southern region of Ecuador. Learners' proficiency levels corresponded to B1 and B2 according to the Common European Framework of References (Council of Europe, 2020). The researchers of this study were the instructors of the aforementioned courses.

3.2 Research Instruments

The instruments included the use of an online questionnaire, which was applied to determine students' learning expectations about the use of games in EFL teaching and learning. This instrument comprised a five-point Likert Scale and open-ended questions. An observation checklist based on five-point Likert Scale items was used to register students' involvement in terms of willingness, participation and motivation in the engagement phase at the beginning, middle and end of the different stages of EFL lessons. This instrument was designed and scored by the researchers. An online perceptions questionnaire (close-ended and open-ended questions) was administered to identify the students' perceptions about the use of the GBL approach in the EFL classroom. A semi-structured interview was also applied to confirm the participants' views regarding the use of the GBL approach.

3.3 Procedure

The study followed a mixed-method approach which involved gathering and analysing qualitative and quantitative data. As Creswell and Creswell (2017) state, the use of mixed-method approaches provides a better comprehension of a research problem than using just one research approach. The GBL approach was implemented to enhance students' engagement during the didactic sequence of EFL lessons. The first stage included the administration of the learning expectations questionnaire. After analysing the results of that questionnaire, an intervention process was carried out for 14 weeks in four different courses in which GBL activities (language quizzes) were designed by using Quizizz. The teaching and learning process was adapted so that games were used to promote students' engagement in on-site and online classes. During on-site interactions,

students used their mobile phones, tablets and laptops to participate in games related to linguistic and methodological matters. As for online classes, games were delivered as supplementary activities that were available on the institutional Canvas platform. In synchronous meetings, distance students interacted with the teacher and classmates by means of Zoom to participate in GBL activities. During the intervention, a total of 20 lessons (five per course) were observed by the researchers to register the students' involvement when using games. The aspects that were seen included learners' willingness to get involved in the lessons, their motivation to learn the target language, and their participation level. In the last stage of the intervention, the online perceptions questionnaire was administered, and the interview was conducted with 16 EFL students enrolled in the four courses of this study. It is worth mentioning that the questionnaires were subjected to a rigorous validation process before being administered. Thus, the internal consistency of the items was 0.7 (Cronbach's alpha), which proved that they were reliable.

4. Results and Discussion

In the diagnostic phase, participants (59.3%) indicated that they were skillful at using technological tools, which had scarcely been used in previous courses. It is worth mentioning that the participants' opinions concerning the GBL approach were diverse because most of them (62.5%) did not know about this method, while 21.87% of the students had been in courses where teachers had eventually used it. Finally, 15.63% of the participants did not internalise the elements related to this approach. In addition, students suggested that they wanted their teachers to use diverse means for engagement such as games (71.8%), PowerPoint presentations (14.2%), flipcharts (7.8%), questioning (3.1%), and others (3.1%).

Regarding the students' attitudes towards the use of the GBL approach for classroom engagement (see Table 1), the results of the observation evidenced that at the beginning of the lessons, most of the participants (96%) seemed enthusiastic when using Quizizz. These results are aligned with Zou et al.'s (2019) study, in which it was found that the implementation of game-based activities enhances EFL learners' engagement and enthusiasm.

In addition, the majority of participants (98%) paid attention to the topics that were going to be discussed in the lesson and responded to questions based on the activities and resources used by their teachers. In this respect, Wang (2015) asserts that the use of games has the potential to increase students' attention and helps them to keep more focused on the contents to be studied.

Likewise, 98% of the students enjoyed the ICT tools that the teachers used to present the lesson and all of them liked the resources (PowerPoint presentations, pictures, realia, games, videos, songs, among others). Certainly, Zulfa and Ratri (2022) affirm that the advancement of technology facilitates students' access to different types of materials and resources, which supports the process of teaching and learning in the digital age.

In the middle of the lessons, 91% of the students seemed to enjoy practising the contents presented by their teachers through the Quizizz tool. Similarly, 92% of learners effectively participated in the different classroom discussions promoted by their instructors on Quizizz. In this regard, by using Quizizz in class, students can maintain discussions after completing the quiz to review each question and obtain feedback from the teacher (Zainuddin et al., 2020).

Regarding the use of Quizizz games to develop students' critical thinking skills, the majority of participants (98%) carried out different types of tasks that allowed them to use games as a means to enhance their ability to examine, judge, interpret and/or evaluate topics related to linguistic and pedagogical issues in the field of EFL teaching and learning. These results are aligned with what Nashar et al. (2021) found since the use of the Quizizz application improved the learners' critical thinking skills.

As for the use of Quizizz games to help learners develop their communication skills, 81% of them seemed to have a very good performance in most of the activities that involved oral communication, while 17% of the students performed at a good level. Another aspect that was observed in the middle of the lessons dealt with the effect of using Quizizz games to help learners develop their pedagogical skills. In this respect, the majority of the participants (89%) seemed to be engaged with this tool, especially when having discussions related to diverse methodological aspects. In this respect, Anak and Hua (2021) manifest that Quizizz enhances the teaching and learning of English and also serves as a vital method for fostering enthusiasm and a strong desire to learn this language.

With respect to the students' attitudes at the end of the lessons, 92% of the participants were able to show their knowledge of the contents studied using the Quizizz tool. Moreover, most of the students (94%) claimed that Quizizz helped them to reflect on their progress. These results are similar to those found in the study by Dhamayanti (2021), which demonstrates the benefits of Quizizz as an effective and motivating tool that supports the learning process in the English classroom.

On the other hand, the use of games through Quizizz was seen as helpful since learners (91%) could receive instructors' immediate feedback based on the tool. In this same line of thought, participants liked the use of games (89%) because such activities engaged them to continue participating in future assignments. In this respect, Maraza et al. (2019) affirm that gamification is an effective learning strategy to improve feedback processes because it provides self-assessment opportunities so that language learners can recognise their mistakes without feeling discouraged.

Finally, most students (76%) reinforced their linguistic and pedagogical skills through Quizizz; however, 22% of them seemed not to have completely developed the aforementioned abilities. Regarding the use of Quizizz for enhancing language skills, Zuhriyah and Pratolo (2020) assert that this tool allows EFL learners to improve their confidence and language abilities.

Table 1. Results of the observation

Statements	Not at all	Very little	Neutral	Somewhat	Very much
Beginning of the lesson					
Students look enthusiastic when using Quizizz at the beginning of the lesson.	0%	1%	3%	23%	73%
Students pay attention to the topics that will be discussed in the lesson.	0%	0%	2%	22%	76%
The students answer or respond to questions based on activities and resources used by the teacher.	0%	0%	2%	28%	70%
The students like the ICT tools used by the teacher when presenting the lesson.	0%	0%	2%	17%	81%
The students like the resources used by the teacher when introducing the lesson: PowerPoint presentations, pictures, realia, games, videos, songs, others.	0%	0%	0%	20%	80%
Middle of the lesson					
The students like Quizizz to practice the contents of the lesson.	0%	0%	1%	8%	91%
Quizizz allows students to participate in class discussions.	0%	0%	0%	8%	92%
The use of Quizizz games helps learners to develop their critical thinking skills.	0%	0%	2%	11%	87%
The use of Quizizz games helps learners to develop their communication skills.	0%	0%	2%	17%	81%
The use of Quizizz games helps learners to develop their pedagogical skills.	0%	0%	2%	9%	89%
End of the lesson					

Statements	Not at all	Very little	Neutral	Somewhat	Very much
Beginning of the lesson					
The use of Quizizz allows students to show their knowledge of the contents learned.	0%	0%	2%	6%	92%
Quizizz helps students to reflect on their own progress.	0%	0%	1%	5%	94%
Quizizz games allow students to receive immediate feedback.	0%	0%	1%	8%	91%
The use of Quizizz games engages students to participate in the next class.	0%	0%	2%	9%	89%
The use of Quizizz reinforces students' linguistic and pedagogical abilities.	0%	0%	2%	22%	76%

Table 2. Students' perceptions

Statements and stages of the lesson	Not at all	Very little	Neutral	Somewhat	Very much
Beginning of the lesson					
I feel motivated when using Quizizz at the beginning of the lesson.	0%	0%	5%	24%	71%
I pay attention to the topics that will be discussed in the lesson.	0%	0%	3%	23%	74%
I can answer or respond to questions based on activities and resources used by the teacher.	0%	0%	5%	23%	70%
I like the ICT tools used by the teacher when presenting the lesson.	0%	0%	2%	22%	76%
I like the resources used by the teacher when introducing the lesson: PowerPoint presentations, pictures, realia, games, videos, songs, others.	0%	0%	1%	16%	83%

Statements and stages of the lesson	Not at all	Very little	Neutral	Somewhat	Very much
Beginning of the lesson					
Middle of the lesson					
I like Quizizz to practise the contents of the lesson.	0%	0%	3%	14%	83%
The use of Quizizz allows me to participate in class discussions.	0%	0%	3%	8%	89%
The use of Quizizz games helps me to develop my critical thinking skills.	0%	0%	2%	14%	84%
The use of Quizizz games helps me to develop my communication skills.	0%	0%	2%	11%	87%
The use of Quizizz games helps me to develop my pedagogical skills.	0%	0%	5%	22%	73%
End of the lesson					
The use of Quizizz allows me to show my knowledge of the contents learned.	0%	0%	2%	12%	86%
Quizizz helps me to reflect on my own progress.	0%	0%	2%	6%	92%
Quizizz games allow me to receive immediate feedback.	0%	0%	3%	13%	84%
The use of Quizizz games engages me to participate in the next class.	0%	0%	2%	12%	86%
The use of Quizizz reinforces my linguistic and pedagogical abilities.	0%	0%	3%	25%	72%

Table 3. Results of the students' interview

Stage	Students' perceptions in the interview
Beginning of the lesson	<ul style="list-style-type: none"> • Students were motivated when using Quizizz as they were engaged with the contents presented in the class. • The topics were interesting because they were related to the contents that were going to be discussed in the lesson.

	<ul style="list-style-type: none"> • The questioning strategy allowed students to understand the topics of the class because they had the opportunity to relate previous knowledge to the new content presented. • Students liked the resources and ICT tools used by the teachers when presenting the lesson due to their easy access and appealing design.
Middle of the lesson	<ul style="list-style-type: none"> • Students enjoyed practicing the contents by using Quizizz because this tool promoted interaction and collaboration. • Students developed their critical thinking skills by using Quizizz games based on the contents studied because they had to analyse, compare, contrast and evaluate information. • Quizizz games helped students to practice their communication and pedagogical skills because they were aligned to the course syllabus.
End of the lesson	<ul style="list-style-type: none"> • Students could demonstrate their knowledge by using Quizizz because the games were related to the contents studied in the lesson. • Quizizz games helped students to reflect on their own progress because they received immediate feedback. • Quizizz games engaged students to participate in classroom activities, and they developed their linguistic and pedagogical skills because they could check their own progress.

Regarding the participants' perceptions of the use of the GBL approach in the EFL classroom, most of them (95%) affirmed that they felt motivated when using Quizizz at the beginning of the lesson (see Table 2). These results were confirmed by the interviews (see Table 3), in which students mentioned that they were engaged with the contents presented in the class because Quizizz was motivating. Also, the majority of the participants (97%) mentioned that at the beginning of the lesson, they paid attention to the topics that were going to be discussed. In fact, the interview results evidenced that the topics to be analysed in the lesson caught the students' interest. As Dhamayanti (2021) asserts, the use of Quizizz in the EFL classroom can increase learners' motivation and enthusiasm because the features of this tool enhance students' interest and prevent monotony during the lesson.

Furthermore, 93% of the students perceived that the activities and resources used by their teachers helped them when responding to questions. According to the participants' interviews, the questioning strategy allowed them to understand the topics of the lesson because they had the opportunity to relate previous knowledge to the new content presented. Certainly, when using Quizizz, students can evaluate their progress and realise which contents need to be reinforced; moreover, games increase their eagerness to respond quickly and learn challenging topics (Munawir & Hasbi, 2021).

As for the use of ICT tools and resources, 98% of the participants affirmed that they liked the tools used by the teachers at the beginning of the lesson. In this respect, the results of the interview evidenced that students liked the ICT resources instructors utilised when presenting the lesson due to their easy access

and appealing design. In addition, 99% of the participants liked the resources used by the teachers to introduce the new topics; these tools included PowerPoint presentations, pictures, realia, games, videos and songs, among others, which were utilised at the beginning of the lesson. In this respect, Kupchyk and Litvinchuk (2021) affirm that the use of technology can enhance teaching practice through highly engaging activities and foster active learning inside and outside the classroom.

In the middle of the lesson, 97% of the students affirmed that they liked to use Quizizz to practice the different concepts taught in the lessons, while only 3% of them had a neutral position with respect to this aspect. In fact, according to the interviews, the participants affirmed that they enjoyed practising the contents through games because Quizizz promoted interaction and collaboration among them. Certainly, Zulfa and Ratri (2022) affirm that Quizizz offers interesting features that can be used by teachers and students during e-learning activities, which means that this tool has many advantages in terms of enhancing learners' experiences interactively.

Regarding the use of Quizizz to promote students' participation in class discussions, 89% of them affirmed that this tool was very helpful for this purpose. Similarly, most of the students (98%) indicated that Quizizz games helped them develop their critical thinking skills because, according to the interview, gamified activities allowed them to analyse, compare, contrast and evaluate information. In this context, Nashar et al. (2021) assert that the use of Quizizz enhances learners' motivation, and it improves their critical thinking abilities, especially when teachers choose an appropriate model to teach their lessons.

With respect to the effectiveness of Quizizz games to help learners develop their communication skills, 98% of them perceived that this tool was helpful for this purpose. These results are aligned with Dhamayanti's (2021) study, it was found that the use of Quizizz promotes good communication among students in the EFL classroom. In relation to the use of Quizizz games to develop students' pedagogical skills, 95% of the participants perceived that the different games designed by their teachers were useful. Besides, the interviews revealed that learners liked using Quizizz games because they were aligned with the course syllabus.

As for the learners' views with respect to the use of the GBL approach, at the end of the lessons, most of them (98%) indicated that Quizizz allowed students to prove their understanding of the contents studied. The results of the interview showed that learners perceived that Quizizz games were designed in relation to the lessons. Furthermore, 92% of the participants claimed Quizizz was helpful, as this tool enabled them to reflect on what they were learning in the courses. These results are similar to those found by Mohamad (2020) since the use of the Quizizz app benefited learners in terms of enhancing the content of the course and acquiring self-learning skills.

Regarding the use of games through Quizizz to provide feedback, 84% of the students recognised that the tool allowed them to receive teachers' prompt

feedback; this fact was remarked by learners in the interview since the tool let them reflect on their own progress. In connection with the point previously mentioned, Zuhriyah and Pratolo (2020) state that Quizizz's immediate feedback feature provides students with the opportunity to review and rectify their responses, effectively giving them a second chance to address any errors.

Another aspect was the participants' opinions with respect to the use of Quizizz games at the end of the lesson. In this context, 86% of the students believed that the Quizizz games encouraged them to participate in the next class. These findings are related to Göksün and Gürsoy's (2019) study which found that the post-class quizzes strengthened the students' understanding and readiness for class, as they were already aware of the pre-class quizzes. This, in turn, encouraged learners to stay engaged in the course.

Finally, learners (72%) claimed that their linguistic and pedagogical abilities were very much reinforced thanks to the use of Quizizz, while 25% of the participants asserted such skills were somewhat developed. According to the interviews, students affirmed that their linguistic and pedagogical skills were enhanced as they were able to verify their own progress with the contents. In this respect, Degirmenci (2021) explains that Quizizz is a beneficial and valuable tool in the English language education field and has a favourable impact on both the teaching and learning of this language.

5. Conclusions and Implications

The participants' perceptions towards the use of the GBL approach at the beginning of the lessons were mostly positive because they were engaged with the contents presented. Certainly, the activities and ICT resources used by teachers to introduce new topics promoted motivation, caught learners' interest and allowed them to connect previous knowledge to new content.

The implementation of the GBL approach through Quizizz games favoured students' practice and enjoyment of the different contents presented in the middle of a lesson. Besides, this method promoted interaction and collaboration among learners, and it helped them develop their critical thinking skills as well as their communication and pedagogical abilities.

The use of Quizizz was evaluated by learners and found to be beneficial at the end of the lesson since they claimed that their linguistic and pedagogical skills were significantly improved. Participants believed that Quizizz allowed them to prove their understanding of course content and it was helpful in reflecting on what they were learning. Quizizz permitted learners to receive prompt feedback from teachers and it encouraged them to participate in future classes, being a valuable tool for enhancing learning outcomes.

This study suffered from some limitations. First, it was conducted in a single university; future studies are, therefore, suggested to include more institutions. In addition, the study was conducted with a limited sample of students (64), which restricts the generalisability of the findings. Moreover, further research may utilise a variety of ICT that allow the implementation of the GBL approach.

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7. References

- Adnan, N. H., Norman, H., & Nordin, N. M. (2020). Instructor-generated hand-drawn 2D animations for ESL vocabulary learning in secondary education. *The Asian ESP Journal*, 16(1.2), 67–81.
- Alvarez, C., & Guevara, P. (2021). EFL teachers' perceptions on using pedagogical modules in Ecuador: a focus group interview. *Revista Chakiñan de Ciencias Sociales y Humanidades*, (14), 42–56. <https://doi.org/10.37135/chk.002.14.03>
- Anak, C., & Hua, T. (2021). Exploring a gamified learning tool in the ESL classroom: The case of Quizizz. *Journal of Education and e-Learning Research*, 8(1), 103–108. <https://doi.org/10.20448/journal.509.2021.81.103.108>
- Barak, M., Watted, A., & Haick, H. (2016). Motivation to learn in massive open online courses: Examining aspects of language & social engagement. *Computers & Education*, 94, 49–60. <https://doi.org/10.1016/j.compedu.2015.11.010>
- Bomia, L., Beluzo, L., Demeester, D., Elander, K., Johnson, M., & Sheldon, B. (1997). *The impact of teaching strategies on intrinsic motivation*. ERIC Clearinghouse on Elementary and Early Childhood Education (ERIC Document Reproduction Service No. ED 418925). <https://files.eric.ed.gov/fulltext/ED418925.pdf>
- Brown, H.D., and Lee, H. (2014). *Teaching by principles: An interactive approach to language pedagogy*. Pearson.
- Cabrera-Solano, P. (2022). Game-based learning in higher education: The pedagogical effect of genially games in English as a foreign language instruction. *International Journal of Educational Methodology*, 8(4), 719–729. <https://doi.org/10.12973/ijem.8.4.719>
- Council of Europe (2020). *Common European Framework of reference for languages: Learning, teaching, assessment – Companion volume*. Council of Europe Publishing.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE.
- Deci, E., & Ryan, R. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://selfdeterminationtheory.org/SDT/documents/2000_DeciRyan_PIWhatWhy.pdf
- Degirmenci, R. (2021). The use of Quizizz in language learning and teaching from the teachers' and students' perspectives: A literature review. *Language Education and Technology*, 1(1), 1–11. <http://www.langedutech.com/letjournal/index.php/let/article/view/12/1>
- Dhamayanti, F. I. (2021). EFL students' perception and motivation toward Quizizz as e-learning media in English e-classroom. *Education of English as Foreign Language*, 4(2), 71–78. <https://doi.org/10.21776/ub.educafl.2021.004.02.03>
- Ebner, M., & Holzinger, A. (2007). Successful implementation of user-centered game based learning in higher education: An example from civil engineering. *Computers & Education*, 49(3), 873–890. <https://doi.org/10.1016/j.compedu.2005.11.026>

- Falloon, G. (2020). From digital literacy to digital competence: the teacher digital competency (TDC) framework. *Educational Technology Research and Development*, 68, 2449–2472. <https://doi.org/10.1007/s11423-020-09767-4>
- Fredricks, J., Reschly, A., & Christenson, S. (2019). Conclusion: Status of student engagement interventions. In J. Fredricks, A. Reschly & S. Christenson (Eds.), *Handbook of student engagement interventions* (pp. 375–389). Academic Press. <https://doi.org/10.1016/B978-0-12-813413-9.00025-5>
- Göksün, D. O., & Gürsoy, G. (2019). Comparing success and engagement in gamified learning experiences via Kahoot and Quizizz. *Computers & Education*, 135, 15–29. <https://doi.org/10.1016/j.compedu.2019.02.015>
- Halverson, R., Kallio, J., Hackett, S., & Halverson, E. (2018). Participatory culture as a model for how new media technologies can change public schools. *The Emerging Learning Design Journal*, 3(1), 1. <https://digitalcommons.montclair.edu/eldj/vol3/iss1/1>
- Harmer, J. (2007). The changing world of English. In J. Harmer (Ed.), *The practice of English language teaching* (pp. 13–22). Pearson Longman.
- Hitosugi, C. I., Schmidt, M., & Hayashi, K. (2014). Digital game-based learning (DGBL) in the L2 classroom: The impact of the UN's off-the-shelf videogame, Food Force, on learner affect and vocabulary retention. *Calico Journal*, 31(1), 19–39. <https://doi.org/10.11139/cj.31.1.19-39>
- Huizenga, J., Admiraal, W., Akkerman, S., & Dam, G. T. (2009). Mobile game-based learning in secondary education: engagement, motivation and learning in a mobile city game. *Journal of Computer Assisted Learning*, 25(4), 332–344. <https://doi.org/10.1111/j.1365-2729.2009.00316.x>
- Inayati, N., & Waloyo, A. A. (2022). The influence of Quizziz-online gamification on learning engagement and outcomes in online English language teaching. *Journal on English as a Foreign Language*, 12(2), 249–271. <https://doi.org/10.23971/jefl.v12i2.3546>
- Irwansyah, R., & Izzati, M. (2021). Implementing Quizizz as game based learning and assessment in the English classroom. *TEFLA Journal (Teaching English as Foreign Language and Applied Linguistic Journal)*, 3(1), 13–18. <https://doi.org/10.35747/tefla.v3i1.756>
- Jenkins, J. (2015). *Global English: A resource book for students*. Routledge.
- Lim, C. J., & Lee, S. (2007). Pedagogical usability checklist for ESL/EFL e-learning websites. *Journal of Convergence Information Technology*, 2(3), 67–76.
- Kasuma, S. A. A. (2017). Four characteristics of Facebook activities for English language learning: A study of Malaysian university students' needs and preferences. *Advances in Language and Literary Studies*, 8(3), 155–171. <http://dx.doi.org/10.7575/aiac.all.v.8n.3p.155>
- Kirriemuir, J., & McFarlane, A. (2004). *Literature review in games and learning*. <https://telearn.archives-ouvertes.fr/file/index/docid/190453/filename/kirriemuir-j-2004-r8.pdf>
- Kulpa, A. (2017). Applied gamification: Reframing evaluation in post-secondary classrooms. *College Teaching*, 65(2), 5868. <https://doi.org/10.1080/87567555.2016/1232693>
- Kupchyk, L., & Litvinchuk, A. (2021). Constructing personal learning environments through ICT-mediated foreign language instruction. In *Journal of physics: Conference series* (Vol. 1840, No. 1, p. 012045). IOP Publishing. <https://doi.org/10.1088/1742-6596/1840/1/012045>

- Li, Y., & Lerner, R. M. (2013). Interrelations of behavioral, emotional, and cognitive school engagement in high school students. *Journal of Youth and Adolescence*, 42, 20–32. <http://dx.doi.org/10.1007/s10964-012-9857-5>
- Maraza, B., Cuadros, L., Fernandez, W., Alay, Y., & Chillitupa, A. (2019). Análisis de las herramientas de gamificación online Kahoot y Quizizz en el proceso de retroalimentación de aprendizajes de los estudiantes. *Revista Referencia Pedagógica*, 7(2), 339–362. <https://rrp.cujae.edu.cu/index.php/rrp/article/view/193/216>
- Martín del Pozo, M., Basilotta Gómez-Pablos, V., & García-Valcárcel Muñoz-Repiso, A. (2017). A quantitative approach to pre-service primary school teachers' attitudes towards collaborative learning with video games: previous experience with video games can make the difference. *International Journal of Educational Technology in Higher Education*, 14, 1–18. <https://doi.org/10.1186/s41239-017-0050-5>
- Mohamad, A. (2020). Student as teacher-alternative revision method via Quizizz app. *MALIM: Jurnal Pengajian Umum Asia Tenggara*, 21(1), 150–159. <https://doi.org/10.17576/malim-2020-2101-12>
- Munawir, A., & Hasbi, N. (2021). The effect of using Quizizz to EFL students' engagement and learning outcome. *English Review: Journal of English Education*, 10(1), 297–308 <https://doi.org/10.25134/erjee.v10i1.5412v>
- Murray, N. (2016). *Standards of English in higher education: Issues, challenges and strategies*. Cambridge University Press.
- Nashar, Nurhasanah, A., & Fauzan, R. (2021). The effectiveness of critical thinking ability on the basis of Quizizz application viewed from problem based learning model in history learning of senior high school. In *IOP Conference Series: Earth and Environmental Science* (Vol. 747, No. 1, p. 012046). IOP Publishing. <https://doi.org/10.1088/1755-1315/747/1/012046>
- Noroozi, O., Dehghanzadeh, H., & Talaee, E. (2020). A systematic review on the impacts of game-based learning on argumentation skills. *Entertainment Computing*, 35, 100369. <https://doi.org/10.1016/j.entcom.2020.100369>
- Oga-Baldwin, W. Q. (2019). Acting, thinking, feeling, making, collaborating: The engagement process in foreign language learning. *System*, 86, 102128. <https://doi.org/10.1016/j.system.2019.102128>
- Pitoyo, M. D., Sumardi, S., & Asib, A. (2020). Gamification-based assessment: The washback effect of Quizizz on students' learning in higher education. *International Journal of Language Education*, 4(1), 1–10. <https://dx.doi.org/10.26858/ijole.v4i2.8188>
- Qian, M., & Clark, K. R. (2016). Game-based learning and 21st century skills: A review of recent research. *Computers in Human Behavior*, 63, 50–58. <https://doi.org/10.1016/j.chb.2016.05.023>
- Reinhardt, J., & Sykes, J. M. (2012). Conceptualizing digital game-mediated L2 learning and pedagogy: Game-enhanced and game-based research and practice. In H. Reynders (Ed.), *Digital games in language learning and teaching* (pp. 32–49). Palgrave Macmillan. https://doi.org/10.1057/9781137005267_3
- Rose, H. (2019). The future of English in global higher education: Shifting trends from teaching English to teaching through English. *CALR Journal*, 9. https://web.aou.edu.lb/research/Documents/Article_1_by_Dr_Heath_Rose.pdf
- Sadoughi, M., & Hejazi, S. Y. (2021). Teacher support and academic engagement among EFL learners: The role of positive academic emotions. *Studies in Educational Evaluation*, 70, 101060. <https://doi.org/10.1016/j.stueduc.2021.101060>

- Selvi, M., & Çosan, A. Ö. (2018). The effect of using educational games in teaching kingdoms of living things. *Universal Journal of Educational Research*, 6(9), 2019–2028. <https://doi.org/10.13189/ujer.2018.060921>
- Shaffer, D., Squire, K., Halverson, R., & Gee, J. (2005). Video games and the future of learning. *Phi Delta Kappan*, 87(2), 105–111. <https://doi.org/10.1177/003172170508700205>
- Tang, J., Chen, J., Ku, D., Chao, L., Shih, T., & Weng, M. (2009). Constructing the 2D adventure game-based assessment system. In M. Spaniol, L. Quing, K. Ralf, & H. Lau (Eds.), *International conference on web-based learning* (pp. 376–385). Springer-Verlag. https://doi.org/10.1007/978-3-642-03426-8_45
- Vandercruysse, S., Vandewaetere, M., & Clarebout, G. (2012). Game-based learning: A review on the effectiveness of educational games. In M. M. Cruz-Cuhuna (Ed.), *Handbook of research on serious games as educational, business and research tools*, (pp. 628–647). <https://doi.org/10.4018/978-1-4666-0149-9.ch032>
- Wang, A. I. (2015). The wear out effect of a game-based student response system. *Computers & Education*, 82, 217–227. <https://doi.org/10.1016/j.compedu.2014.11.004>
- Zainuddin, Z., Shujahat, M., Haruna, H., & Chu, S. K. W. (2020). The role of gamified e-quizzes on student learning and engagement: An interactive gamification solution for a formative assessment system. *Computers & Education*, 145, 103729. <https://doi.org/10.1016/j.compedu.2019.103729>
- Zou, D., Huang, Y., & Xie, H. (2019). Digital game-based vocabulary learning: where are we and where are we going? *Computer Assisted Language Learning*, 34(6), 1–27. <https://doi.org/10.1080/09588221.2019.1640745>
- Zuhriyah, S., & Pratolo, B. W. (2020). Exploring students' views in the use of Quizizz as an assessment tool in English as a foreign language (EFL) class. *Universal Journal of Educational Research*, 8(11), 5312–5317. <https://doi.org/10.13189/ujer.2020.081132>
- Zulfa, A. I., & Ratri, D. P. (2022). EFL students' perceptions toward Quizizz as an assessment tool during online learning. *The Journal of English Literacy Education: The Teaching and Learning of English as a Foreign Language*, 9(1), 78–87. <https://dx.doi.org/10.36706/jele.v9i1.17378>