

# Education Quarterly Reviews

Luzardo, A., Moreira, G., Farfan, G., & Villafuerte-Holguin, J. (2024). Gamification to Strengthen Children's Motivation to Learn English as a Foreign Language in the Community Development Centers. *Education Quarterly Reviews*, 7(2), 147-159.

ISSN 2621-5799

DOI: 10.31014/aior.1993.07.02.584

The online version of this article can be found at: https://www.asianinstituteofresearch.org/

Published by:

The Asian Institute of Research

The *Education Quarterly Reviews* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Education Quarterly Reviews* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of education, linguistics, literature, educational theory, research, and methodologies, curriculum, elementary and secondary education, higher education, foreign language education, teaching and learning, teacher education, education of special groups, and other fields of study related to education. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Education Quarterly Reviews* aims to facilitate scholarly work on recent theoretical and practical aspects of education.





The Asian Institute of Research Education Quarterly Reviews

Vol.7, No.2, 2024: 147-159 ISSN 2621-5799

Copyright © The Author(s). All Rights Reserved DOI: 10.31014/aior.1993.07.02.584

# Gamification to Strengthen Children's Motivation to Learn English as a Foreign Language in the Community Development Centers

Axcel Ivan Luzardo Burgos<sup>1</sup>, Gustavo Alexander Moreira Alay<sup>2</sup>, Ulbio Gonzalo Farfán Corrales<sup>3</sup>, Jhonny Saulo Villafuerte Holguín<sup>4</sup>

<sup>1</sup> Universidad Laica Eloy Alfaro de Manabí, Ecuador. https://orcid.org/0009-0008-7997-5519 Email: e1316617198@live.uleam.edu.ec

<sup>2</sup> Universidad Laica Eloy Alfaro de Manabí, Ecuador. https://orcid.org/0009-0007-1790-3555 Email: e1313155507@live.uleam.edu.ec

<sup>3</sup> Universidad Laica Eloy Alfaro de Manabí, Ecuador. https://orcid.org/0000-0002-5703-51707 Email: ulbio.farfan@uleam.edu.ec

<sup>4</sup> Universidad Laica Eloy Alfaro de Manabí, Ecuador. https://orcid.org/0000-0001-6053-6307 Email: jhonny.villafuerte@uleam.edu.ec

# Abstract

Instructors require innovative teaching tools to engage and keep learners' attention in every class. This study aims to compare the efficiency of gamification in environments of software and traditional indoor games for teaching vocabulary to students in Communities Development Centers. The research uses the interpretative paradigm and the mixed approach of educational research methodology. The participants are 14 children attending two different centers located in Manta-Ecuador during July-December 2023. The instruments used to collect information are contextual observation, interviews, and English language vocabulary pretest and posttest. The research team designed an educational intervention using software and traditional indoor games to increase participants' motivation for learning new vocabulary in the English language. The results show an increase in the number of new words learned in both groups. However, the results showed that students learn more new words when playing software games compared to when they use traditional indoor games in the same period. It concludes that software games can reach higher efficiency in the vocabulary acquisition process of children attending community centers.

Keywords: Gamification, Learning English, Vocabulary, Motivation, Children

# 1. Introduction

Innovations in education worldwide frequently use technology to stimulate children's concentration. Consequently, students expect to have more attractive learning material to keep their attention and participation during lessons. In the English as a foreign language context, the instructors need the permanent innovation of their didactics and teaching methodologies to keep the student's interest in learning. Such a situation remarks motivation

for learning as a crucial factor in producing positive language learning experiences and results, even in places with limited teaching material, socio-educational conditions, and parental influences.

According to Moreno (2017), the student's motivation and demotivation for learning can influence the people's interest in doing something until they complete or finish it. Such an interest can be influenced by school or family factors. Thus, EFL instruction requires changes in the traditional methodologies that center the classes on grammar activities (Çankaya, 2018). Students' motivation for learning is reduced because the strategies used by the instructors are not fun and attractive enough to engage children's interest (Talia & Nurkhamidah, 2023).

Children in Ecuador think they have a low probability of using the target language in their daily lives, resulting in irrelevant for their future lives. In addition, the children's poor performance in EFL classrooms can also be attributed to the shallow depth of teaching by the teacher's ineffective practice, and students perceive learning EFL as an obligation subject rather than a communicational necessity. Then, students may receive low grades, which can be detrimental to their self-esteem and lead to stress or anxiety. As a result, students finish elementary and secondary education without reaching the level B1 expected according to the national curriculum (Intriago et al., 2019).

The authors of this work were inspired by the affirmation of Peña (2019) and Ishida et al. (2024), concerning that all students have the possibility of understanding and mastering English as a communicative tool and execute the present research to contribute with didactic strategies to make the EFL instruction an exciting and fun experience for children. The research begins with a review of the constructs (1) Students' motivation for learning the English language, (2) Gamification as an innovative didactic strategy, and (3) English language instruction. The questions of research to answer are:

- What is the contribution of gamification for vocabulary acquisition in EFL, collected in (a) formal classroom, (b) sessions during internships, and (c) community service projects?
- What is the contribution of gamification on participants' motivation for learning vocabulary in EFL?
- What are the changes in the participants' vocabulary acquisition using different kinds of games?
- What contribution is more efficient for participants' vocabulary acquisition, software games or traditional indoor games?

This research aim is to compare the efficiency of gamification in software and traditional indoor games for vocabulary acquisition in two community and development centers.

#### 2. Literature review

# 2.1. Students' motivation for learning English language

According to Alizadeh (2016), the most relevant factor for teaching a foreign language is the motivation for learning. However, students tend toward a low motivation for learning because they focus on diagnostic tests and grades rather than English as a culture and worthy communicational resource (Sahin et al., 2016). Motivation and Demotivation are concepts related to the presence or lack of interest of a person in doing any activity until finish it. There are many factors concerning children's schools and families that can influence positively or negatively increasing the person's position toward one of them (Moreno, 2017). On the other hand, the influences of parents and professors as well as students' attitudes are attributed to motivation for learning a second language (Rahman et al., 2017).

Instructors' classroom management skills are among the most important areas affecting students' motivation (Yilmaz et al., 2017). Nevertheless, Çankaya (2018) argues that students are often unmotivated to learn the English language because their instructors use very traditional methodologies or center the classes on grammar activities. According to Sengkey (2018), students should be aware of the global use of English language and its advantages. Seeing English further is a great reason to learn it, expanding opportunities to get a job, improving education, and gaining social recognition (Nguyen, 2019).

Another clear point that Purnama et al. (2019) mentioned is that learners having poor motivation have fewer possibilities to successfully achieve the learning objectives. Under Maria & Segundo's (2020) interpretation, motivation is of vital importance since it allows students to have more effort and perseverance. Students adequately motivated can learn a foreign language as a contribution to their personal development (Ortega-Auquilla et al., 2020). However, instructors should look for appropriate strategies for helping learners to keep such determination to learn a new topic. Here Pérez (2022) introduces gamification as an essential strategy to face the challenges that learning a foreign language.

Studies by Ishida et al. (2024) revealed that both educators and parents have a relevant influence on learners' motivation for learn a foreign language. Thus, students have different levels of motivation to learn the target language depending on their demographic background, previous level of foreign language knowlege, exposure to foreign cultures, and external influences. While what parents say and do, their beliefs and attitudes towards a foreign language even influence children's academic performance.

# 2.2. Instructors' challenges for introducing new vocabulary in a foreign language class

Instructors became guides for students' educational purposes. They play a very significant role in learners' education in formal or informal instruction processes (Al-Khasawneh & Al-Omari, 2015). Thus, one of the most challenging activities of an instructor is to present diverse and innovative didactic materials in every lesson to catch learners' attention. They also supply permanent, but adequate feedback for helping learners achieve their educational goals (Alizadeh, 2016).

The acquisition of a language requires the instructors' decision to pursue, generate, and develop dynamic and engaging strategies to boost the impetus of students and finally, to reach the lesson aims of the lesson through the best way (Díaz & Zajia, 2020). Thus, English language instruction uses diverse teaching methods, strategies, policies, practices, language evaluation, and testing (Duong & Nguyen, 2021).

To Gortaire et al. (2022) teaching activities to introduce new vocabulary are relevant when instructors retain the focus of students in watching films or television series, matching words to their meaning, or some other activities to reinforce memory. In such a scenario, not all games need to be planned, those activities can come up at any time of the class if there is a meaningful purpose for students. Consequently, the use of interactive activities also contributes to improving teacher-learner communication (Semartiana et al., 2022).

Yaroshenko et al. (2022) state that interesting or dynamic classes require instructors to have creative ideas and toys to inspire students in the learning process. On the other hand, it is probable that some drawbacks appear in the application of this dynamic strategy, such as the lack of resources to acquire new knowledge and the inexperience of the teacher in using different games inside the classroom (Zambrano et al., 2022).

According to Torres & Hillary (2022) children can get several benefits in their learning process with the use of interactive learning activities such as (1) activation of students' minds to involve auditory and visual neural connections, (2) improve students' concentration and memory, (3) increase the learners' participation, and (4) support the family relationships.

The integration of interactive strategies for teaching vocabulary is a route that can strengthen more solid and lasting learning in students. It is key to make the process of learning vocabulary more attractive and effective. To do this, the innovation of teaching strategies, educational research, and the adaptation of content to the needs and preferences of students must be articulated (Tabassum and Naveed, 2024). Thus, the challenge for foreign language instructors is to maintain the commitment to explore and adopt innovative pedagogical approaches aimed at increasing students' desire to communicate using the target language.

# 2.3. Gamification is a fun and attractive teaching strategy

The use of gamification makes learners feel motivated based on the resources and games that are used. It also improves the participants' interrelation in the classroom and can help improve learners' different skills (Figueroa, 2015). Thus, the execution and creation of a didactic strategy such as gamification is a way to achieve the teaching objectives (Ardoiz, 2017).

The implementation of game design features in non-gaming environments is known as gamification. Game components such as point levels, badges, progress bars, awards, and leaderboards are employed to allow learners to enjoy and motivate them to continue studying (Boyinbonde, 2018). However, gamification has received comments because it is considered that it does not comply with the curriculum (Herrera, 2018).

Hashim et al (2019) state the high contribution of gamification in the teaching and learning process. Besides, gamification improves motivation and enjoyment to reach more frequency in learners' participation, especially when instructors create a more friendly learning environment. Gamification is a component of face-to-face English classes that includes dynamics of collaboration, challenge, and evaluation (Amaya & Bajaña, 2020). Through gamification, students increase their motivation for self-decision-making, problem-solving, and socialization skills (Dian, 2020).

Gamification could be interpreted as a problem-solving tool to resolve possible barriers to the teaching-learning process (Pinto et al., 2021). Al-dosakee & Ozdamli (2021) agree that gamification is an enthusiastic, enjoyable incentive for teaching and learning a second language. In addition, Pérez (2022) states that gamification is an essential strategy to face the challenges that learning a foreign language. Presenting the game as an element to generate learning since children know it before language and even social life.

According to Semartiana et al. (2022), the learning process supported by gamification can increase the students' attention, enjoyment, and performance and improve teacher-learner communication. In addition, Fiuza et al. (2022) affirm that universities and other educational courses should offer more information about gamification techniques in the classroom to create more teaching activities according to students' needs. Besides, when children find themselves inside a classroom surrounded by interactive funny, and attractive activities they can learn from their own age and behavioral condition. However, instructors must update their knowledge and skills to respond efficiently to students' expectations regarding the use of educational technology in the context of Ecuador (Pin et al., 2023).

Among the previous studies related to this research appear the work of Hashim et al. (2019) when students study new vocabulary through online language games, they achieve superior results. Once learners are interested in playing, their self-confidence in gaining vocabulary rises. However, for EFL students' traditional techniques are less effective. Another study considered is the work of Harvey & Cuadros (2019). They affirm the importance of to improving traditional education for learning a new language. Thus, gamification is one of the most effective methodologies, since, when a student learns a new language, students must relate the foreign words with those of his native language. The study by Mustiarini (2021) concluded that when gamification is used correctly in the classroom, students are hooked to learning new vocabulary, as educational games make English language education more entertaining and fun. Finally, Jordán et al. (2022) concluded that in everyday life situations, losing a game refers to a detrimental range where learners get frustrated and feel demotivated to continue learning, However, failing is a necessary experience to generate additional strength to advance toward the goal.

# 3. Methodology

This study subscripts to the interpretative paradigm, with a mixed research approach. The participants of the study are 14 children. 7 attending to CDC "Plaza del Mar" and 7 to the CDC "El Palmar". The participants' ages were eight to nine years old; their English level was A1 according to the MCRE (2002). All of them live in the canton Manta, Ecuador.

The ethical norms include the protection of the identity of the participants. All of them accepted voluntarily the participation in the research without any retribution from the project research team. They knew the research

Asian Institute of Research

purposes and their legal representatives signed the informed consent letter. In addition, all the data and information that emerged from the project will be under the custody of the research team leader for 7 years. The data can be used only for academic purposes and never it will be commerce.

Table 1: The participants

CDC	Female	Male	Total	
Plaza del Mar	3	4	7	
El Palmar	4	3	7	
Total	7	7	14	

Resource: community service project register. Note: CDC= Community and Development Center.

#### 3.1 Instruments

The instruments used in this research are (1) Interview guide, (1) Vocabulary knowledge pretest and posttest, and (3) Contextual observation. All the instruments were validated by a panel of experts in the fields of EFL instruction, psychology, and educational administration, all of them subscribed to a national university located in Ecuador. Their recommendations were centered around the understanding of the items, reduction of items to the maximum possible, and categorizing the instruments approaches.

- Interview guide. The instrument has as its goal to collect evidence of the contributions of gamification in new vocabulary instruction in three scenarios (a) formal classroom, (b) internship sessions, and (c) community service sessions. The interview guide is an instrument used to collect people's opinions, ideas, thoughts, or experiences through a narration of what they have lived. A total of three interviews were conducted with 45 minutes each interview overage. They were recorded and the voices of the participants were analyzed using a categorial tree. The evidence was organized in a matrix.
- Vocabulary knowledge pretest and posttest. The instrument is an academic achievement test designed by the research team to assess participants' changes in their vocabulary acquisition process over a predetermined period. The pretest provides instructors with baseline information at the beginning of the educational intervention allowing them to identify participants' vocabulary knowledge, and needs, and to set clearer expectations. The post-test shows the students' vocabulary knowledge changes after the educational intervention. The test consists of a game in which the participants say and write every word they remember using a chosen letter. Another activity used to evaluate the participants' vocabulary knowledge is showing flashcards and projections related to the objects or words included in the list of new vocabulary already introduced in previous sessions.
- Contextual Observation. The instrument was designed by the research team to collect information about the reactions of the participants during vocabulary practice in the EFL class. The research team selected the instrument for finding a place or site where to learn about your central phenomenon. The objectives of the research must be very clear, using careful and contextual observation. The categories observed are related to Students' (1) motivation, (2) participation, (3) reaction before the games, (4) comfort, (5) engagement, (6) interest in playing games, (7) motivation after playing games, (8) for EFL class. The observations were executed in each session of the educational intervention having a total of 12 observations. The observations were taken by a member of the research team.

## 3.2 Process

The stages executed in the research project are the following.

Stage 1. Selection of participants and design of research instruments. - The research team contacted two CDCs located in canton Manta. They have an institutional collaboration agreement with a university that executes the research. The research team decided to use software games in CDC "Plaza del Mar" considering the facilitates of Internet connectivity. Meanwhile, traditional indoor games in CDC "El Palmar."

Stage 2. Interview. - It allows the collection the information about teaching and learning new vocabulary practices in previous formal and informal instructional experiences of teachers' training. The information collected was used to design the educational intervention.

*Stage 3.* Pretest of participants' vocabulary knowledge. - It determines the participants' previous vocabulary knowledge at the beginning of the process.

**Stage 4.** Educational intervention. – The research team designed an educational intervention using games in software and traditional indoor environments. The contents of vocabulary and time for instruction were the same for the two participant groups.

The methodology used: is gamification.

The contain of vocabulary: It is supplied according to the Ecuadorian national curriculum. Sports, food family members, parts of the body, parts of the house, and feelings or emotions.

Time required per session: 45 minutes.

Total intervention time: from the beginning to end of the educational intervention is 12 weeks.

*Stage 5.* Posttest of participants' vocabulary knowledge. - It determines the participants' vocabulary knowledge after the educational intervention.

**Stage 6.** Data analysis. - The research team chose the instrument (a) Contextual observation considering that it allows collection of information about participants' behaviors, physical setting, interactions, and conversations (Creswell, 2020). The research team executed a categorial analysis of the information collected.

In addition, the comparison of the pre and post-tests is a powerful tool for educators and students, helping to set clear standards, measure student growth, and improve instruction (Sanders, 2019). The research team executed a statistical analysis of the data.

## 4. Results

The results presentation follows the order of the research questions that appear in the introduction section of this paper.

**4.1** *In answer to the question:* What is the contribution of gamification for vocabulary acquisition in EFL, collected in (a) formal classroom, (b) sessions during internships, and (c) community service projects? For the analysis of the voices of the participants, the research team chose the following categorical tree.

## Category tree

Main category: Gamification as motivation for learning new vocabulary in EFL.

Instructors wish learners to be more familiar with words in a target foreign language. Gamification is a strategy that turns teaching activities into dynamics that help learners to feel involved with the language and the education as well.

Subcategories: High, moderated, low. See Table 2.

Table 2: Contribution of gamification vocabulary acquisition at formal classroom, internship sessions, and community service projects

Voices of the participants	Subcategory
(a) Context: Formal classrooms	
<b>P1:</b> I think gamification can help learners to relax from another class. They can connect to	High
the EFL instruction and enjoy the vocabulary acquisition process.	
P2: I believe that it is useful and fun to develop the learning process. Lessons are more	
dynamic and that engages students in activities.	High
P3: I realized not all students participate in the activities presented by the teacher. They	
consider games to be just for kids.	Low
P4: I noticed a closer interaction between the student and teacher when executing the	
activities. The classroom environment is comfortable and friendly.	High
(2) Context: Internships sessions	

P1: I created my software games through Word Wall and Live Worksheet because the school	High
had technological resources for teenagers.	
P2: I saw students enjoy the materials all the time. They always showed interest in taking	High
part in the lessons.	
P3: I point out gamification engages students to participate actively by raising their hands,	High
body language, and gestures.	
P4: I consider all students just waited for the games and they were not focused on the class	Moderate
because they usually asked what kind of game they were going to play.	
(3) Context: Community service project	
P1: I created my traditional activities with markers, papers, glue, cardboard, printed images,	High
scissors, and tape to apply to children.	
P2: I felt they were bored because I used to use the same activities in every class and that	Low
meant students were not motivated.	
P3: I highlighted children who attended every class, and they were even motivated before	High
lessons began.	
P4: I would like to say children enjoyed the games presented in class since in the CDC, there	High
was a huge play zone to carry out the activities.	

Source: Interviews to teachers training (Ago-Sep/2023).

Gamification makes more dynamic classes. Consequently, it helps learners to feel calm and relaxed when practicing EFL. It was noticeable by their gestures, body language, and their mood to participate actively, moreover, this strategy encourages them to attend the lessons and facilitates the creation of software and traditional games due to the environment of the classroom and the availability of the physical space.

It was shocking that some students thought that "the activities and games presented by the teacher were just for kids." College students think that this kind of strategy is not appropriate for the education they expect to receive, but it could offer the benefit of the application of the strategy in the English class.

The comment: "I consider all students just waited for the games and they were not focused on the class, because they usually asked the kind of game they were going to play" is pleasant to observe how the game might make students change their way of working depending on it is a repetitive activity or striking enough.

"I highlighted children attended to every class and they even are motivated before lessons began", this statement is spectacular since it is well known that attendance at the CDC is not regular. However, such a result shows people can witness gamification achieve this goal because the group of children was constant during lessons.

**4.2** *In answer to the question:* What is the contribution of gamification on participants' motivation for learning vocabulary in EFL?

The table 3 shows the frequency of evidence observed in children's motivation for learning EFL when instructors use software and traditional indoor games in DCDs located in Canton Manta.

Table 3: Participants` motivation for learning EFL using gamification.

Item	Softwa	are games	Tradi indoo	tional r games	- Observations
nem	Yes	No	Yes No		Observations
1. Students previous motivation for attending to English classes	13	5	16	2	Children demonstrated a high – intermediate motivation when they arrived at the CDC.

2. Students participate willingly in the activities proposed by the teacher	15	3	18	0	Children always participate enthusiastically in both software and traditional games/activities.
3. Students react positively to games and activities to learn English	15	3	18	0	Children did not show bad behaviors towards the games and activities.
4. Students feel comfortable during the games	15	3	17	1	Their body language expressed that they were relaxed.
5. Students are more engaged in English classes after game activities	13	5	17	1	Their motivation increased throughout the lesson after every game.
6. Students are more interested in playing games than learning English	9	9	2	16	Their attention to the class depended on what kind of games or activities were applied.
7. Motivation is maintained during the class after playing games	14	4	18	0	Most of the time it changed due to what activities after the game.

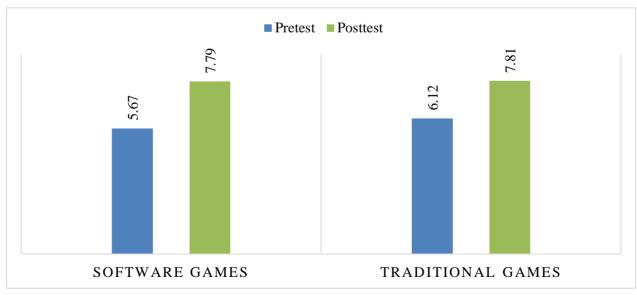
Source: Contextual observations in CDCs (Sep-Dec/2023).

It was appealing how students demonstrated their motivation when they arrived at the CDC. Data obtained from Item 1 shows there is no difference between the CDCs. Likewise, Item 2 neither presents a significant gap from the results now of participating willingly in classes.

In addition, Item 6 was fascinating as children were not only focused on playing the traditional games but rather, they were immersed in learning vocabulary. However, this contrasts with the reality of software games, where students were exposed to the opposite, their motivation depended on the kind of game that was going to be applied.

**4.3** *In answer to the research question:* What are the changes in the participants' vocabulary acquisition process using different kinds of games?

Applying gamification should be considered as a synonym of change, especially for the games performed, because they fulfilled their purpose. Changes achieved with software games may be due to children positively accepting the strategy, as children were motivated to practice the vocabulary more thanks to the games, since images, videos, or didactic explanations during activities were encouraging and promoted the acquisition of vocabulary.



Graphic 1: Changes in participants' vocabulary acquisition before and after the educational intervention

Asian Institute of Research

In comparison with the software games, the changes in the traditional games may be related to the didactic material used in the English classes. Even though these resources enhanced students' motivation, the ones that were chosen were not appropriate for the activities carried out, in addition, the environment, where the students are is a key factor to consider.

**4.4** *In answer to the question:* What contribution is more efficient for participants' vocabulary acquisition, software games or traditional indoor games?

Table 4 shows the results reported in the pretest and posttest of participants' vocabulary acquisition in pretest and posttest.

Table 4: Changes in vocabulary acquisition in EFL through gamification.

Participants	Grou	ıp: Sof	tware	games												
1 ar acipants	Pre-test								Post-test							
Words knowledge	a (-)	b	c (+)	d	e	f	Partial	a (+)	b	c (-)	d	e	f	Partial		
Student A	1	8	7	8	3	6	5,5	3	9	10	10	6	8	7,67		
Student B	3	9	10	6	2	4	5,67	6	10	10	10	6	7	8,17		
Student C	2	9	10	6	1	7	5,83	6	9	9	8	3	8	7,17		
Student D	1	7	8	5	2	7	5	5	8	8	5	5	8	6,5		
Student E	2	4	6	7	8	9	6	6	7	10	7	8	10	8		
Student F	5	6	6	6	5	7	5,83	5	8	10	10	9	10	8,67		
Student G	6	6	8	5	5	5	5,83	10	8	8	6	10	8	8,33		
Words learned	20	49	55	42	28	45	39,66	41	61	65	56	47	59	54,51		
Increment: 2,12	Aver	age					5,67	Average						7,79		
<b>Participants</b>	Grou	ıp: Tra	dition	al indo	or gan	nes										
1 at ucipants	Pre-	test						Post-test								
Words knowledge	a (-)	<b>b</b> (+)	c (+)	d	e	f	Partial	a	<b>b</b> (-)	c	d	e	f (+)	Partia l		
Student A	1	7	8	6	6	5	5,5	3	10	10	8	9	8	8		
Student B	7	8	7	6	5	6	6,5	7	9	8	8	7	9	8		
Student C	6	6	8	6	7	5	6,33	6	8	10	8	9	8	8,17		
Student D	4	8	8	6	8	7	6,83	7	8	10	7	8	9	8,17		
Student E	3	8	7	7	6	7	6,33	7	8	9	8	8	9	8,17		

Student F	6	5	6	5	6	7	5,83	8	8	8	5	8	7	7,33
Student G	3	6	4	7	7	6	5,5	5	6	7	7	8	8	6,83
Words learned	30	48	48	43	45	43	42,83	43	57	62	51	57	58	54,66
Increment: 1,69	Avera	ige					6,12	Average					7,81	

Source: pretest and posttest about vocabulary acquisition.

Note: a= sports; b= food, c=family members, d= parts of the body, e= parts of the house, f= feelings and emotions.

For the group: Software games. – It showed an increase in the number of words learned in English between the pretest and posttest, going from an average of 5.67 to 7.79 points. A difference of 2,12 points. In the pretest, the topic with the highest prior knowledge was family members c(+), with 55 words. Meanwhile, the lowest prior knowledge was the topic sports a(-) in which 20 words were reported. In the posttest, the most advanced theme sports a(+), in which 21 new words were gained. The least advanced theme is family members c(-), in which 10 new words were reported.

For the group: Traditional indoor games. – It showed an increase in the number of words learned in English between the pretest and posttest, going from an average of 6.12 to 7.81 points, presenting an increase in the total words learned in English throughout the pretest and posttest of 1,69 points. In the pretest, the topic sports a(-) had the lowest prior knowledge with 30 known words, and the topics food b(+) and family members c(+) had the highest prior knowledge, in which 48 words were equal. In the posttest, the least advanced topic was food b(-) in which 9 new words were learned and the most advanced topic was feelings and emotions f(+) in which 15 words were gained.

#### 5. Discussion

Based on the literature review and the results obtained in the fieldwork, the research team supports the position of Torres & Hillary (2022) when affirm that turned into contributions of gamification, not only for students but also for teachers, the way how this strategy strengthens participation, activities, classroom environment and relationships was taken advantage positively to learn EFL. Thus, Table 2 presents the voices of participants categorized as high in their impact. It allows to ratify the benefits of gamification on the new vocabulary acquisition process.

The findings obtained from Table 3 allow researchers to affirm what Ardoiz (2017) mentioned, which is that applying gamification is a synonym for motivation. Thus, the didactic games activated the participants' motivation for learning the English language before lessons started and their attention was kept during and after the language practice using games.

Researchers are in full agreement with Çankaya (2018) that children feel unmotivated to learn English in an outdated way since results in Table 3 demonstrate gamification as a current tool raised the grades of children, and that was noticed at the evaluation section if they had learned vocabulary. Likewise, this increment was higher in children with software games and activities than those traditional.

The results show that both groups of participants in different CDCs presented positive results in vocabulary acquisition, but it is necessary to be clear that even the traditional indoor games reached a higher score of 7,81 points, the most efficient progress was in the software games. It reached a more relevant result, progressing from pretest to posttest 2,12 points.

Once data were analyzed, both software and traditional activities reached the goal of increasing the number of words learned, but each in a different way. Software activities worked better at the moment of gaining the vocabulary and then evaluating it because the resources like images or videos facilitate that process, meanwhile,

traditional activities when children put them into practice in dynamic games since vocabulary was presented while they were having fun.

Software games helped children to remember a higher number of new words at the end of the educational intervention, even though they were more engaged in physical resources of the traditional indoor games because they offer more opportunities to play and interact with the partners in comparison to software games.

An unexpected result obtained in this research is related to the limitations of software games which resulted in more repetition for learners during lessons. In addition, participants' interaction was very frequent in both kinds of games CDCs, by raising hands, body language, and some gestures that represented their enthusiasm and the desire to compete.

In addition, it is strongly recommended to use software and traditional games during the same lesson, but in different stages, it could be traditional games in the warmup and the software games during the main activities, consequently, your students will engage in the topic from the beginning until the end of the class. The use of gamification will be useful in the learning process of acquiring a new language if it is 100% focused on your aim since it not only enhances motivation or helps to improve learning but also to create a friendly environment where every single student feels confident and comfortable.

Finally, another finding of this research is that the participants in this research like to spend more hours using software games than traditional indoor games emerging as a direct benefit to participants' vocabulary learning.

#### 6. Conclusion

The writers state total agreement with the research aims. Thus, the participants' motivation for learning EFL focused on vocabulary increased when using gamification in the Community and Development Centers. Both software and traditional indoor games contributed positively to the participants' vocabulary learning. The comparison between the pretest and post-test reported that Traditional indoor games increased by 1,69% points. Meanwhile, 2,12% of the Software games of 2,12% points. In conclusion, Software games showed more efficiency for vocabulary acquisition in this study.

Such results can be used by curriculum designers and educational administrators for making decisions on the innovation of EFL classroom practice. The participants presented a high interest in gamification as a didactic strategy for learning English. It would be advisable for future teachers to apply this strategy to their community service. The study weakness is related to the small number of participants. It related to their attendance at the Community and Development Centers. It depended directly on their parents' commitment. Thus, when parents were busy, they did not take their children to English classes. The research team invites other researchers to explore the same aims using a larger corpus. They propose the research line: Contribution of games to the socio-emotional learning in foreign language classes. The research team expects this work to contribute to the innovation of teaching strategies in current English as a Foreign Language instruction in community development centers in Ecuador and similar contexts around the world.

**Author Contributions:** All authors contributed to this research.

Funding: Not applicable.

Conflict of Interest: The authors declare no conflict of interest.

**Informed Consent Statement/Ethics Approval**: Not applicable.

**Acknowledgment:** This work subscribes to the PINE Program of the Universidad Laica Eloy Alfaro de Manabí-Ecuador. It was carried out with the advice of the *proyecto de investigación Comprensión Lectora y Escritura Académica. Grupo de investigación Innovaciones Pedagogicas para el Desarrollo Sostenible of ULEAM.* 

#### References

- Al-dosakee,K. & Ozdamli, F. (2021). Gamification in teaching and learning languages: a systematic review. *Revista românească pentru educație multidimensională, 13*(2). 559-557. https://doi.org/10.18662/rrem/13.2/436
- Alizadeh, M. (2016). The impact of motivation on English language learning. *International Journal of Research in English Education*, *I*(1), 11-15. Available at http://ijreeonline.com/article-1-23-en.pdf (10. Jan.2024).
- Al-Khasawneh, F. M. & Al-Omari, M. A. (2015). Motivations towards learning English: The case of Jordanian gifted students. *International Journal of Education*, 7(2). 306-321. https://doi.org/10.5296/ije.v7i2.7699
- Ardoiz, L. (2017). Gamification in English teaching in primary education. Universidad de Valladolid. Facultad de Educación de Soria. Available at. http://uvadoc.uva.es/handle/10324/29552 (10.jan.2024).
- Çankaya, P. (2018). Demotivation Factors in Foreign Language Learning. *Journal of Foreign Language Education and Technology*, *3*(1). 1-17. Available at https://www.ceeol.com/search/article-detail?id=781953 (10. Jan. 2024).
- Creswell, J. & Báez, J. (2020). 30 Essential Skills for the Qualitative Researcher. SAGE Publications, 30(2).
- De Europa, C. (2002). Marco común europeo de referencia para las lenguas: aprendizaje, enseñanza, evaluación. https://cvc.cervantes.es/ensenanza/biblioteca\_ele/marco/cvc\_mer.pdf
- Díaz, I. Y. A. & Zajia, J. X. B. (2020). The use of gamification to enhance the English as a foreign language. *Polo del conocimiento: Revista científico-profesional*, *5*(3). 865-881. DOI: 10.23857/pc.v5i3.1388
- Duong, T. M. & Nguyen, H. T. T. (2021). Implementing Task-Based Language Teaching in Vietnamese Secondary Schools: What Hinders EFL Teachers? *TESL-EJ*, 25(2), n2. Available at https://files.eric.ed.gov/fulltext/EJ1314679.pdf (10. Jan. 2024).
- Figueroa, J. F. F. (2015). Using gamification to enhance second language learning. *Digital Education Review*, 27 (1). 32-54. Available at https://dialnet.unirioja.es/servlet/articulo?codigo=5495904 (10. Jan. 2024).
- Fiuza-Fernández, A., Lomba-Portela, L., Soto-Carballo, J., & Pino-Juste, M.R. (2022). Study of the knowledge about gamification of degree in primary education students. *PLoS ONE 17*(3), e0263107. https://doi.org/10.1371/journal.pone.0263107
- Gortaire Díaz, D., Sandoval Pérez, M. J., Romero Ramírez, E., & Mora Aristega, J. (2022). Case Study: Gamification as a strategy for vocabulary learning in university students. *Ciencia Latina Revista Científica Multidisciplinar*, 6(6), 7992-8005. https://doi.org/10.37811/cl\_rcm.v6i6.3970
- Harvey, N. & Cuadros, A. (2019). Adapting competitiveness and gamification to a digital platform for foreign language learning. *International journal of emerging technology in learning*, 15(20). https://doi.org/10.3991/ijet.v15i20.16135
- Hashim, H., Rafiqah, K., & Yunus, M. (2019). Improving ESL learners' grammar with gamified learning. *Arab world English journal*, *5*(1), 41-50. https://dx.doi.org/10.24093/awej/call5.4
- Herrera Rodriguez, T. (2018). Gamification and Game-based Learning as Methods to Motivate Students Learn English Vocabulary. Available at http://riull.ull.es/xmlui/handle/915/11550 (20. Dec. 2023).
- Ishida, A., Manalo, E., & Sekiyama, T. (2024). Students' motivation to learn English: The importance of external influence on the ideal L2 self. *Frontiers in Education*, 8, 1264624. https://doi.org/10.3389/feduc.2023.1264624
- Jordán Buenaño, C. del R., Encalada Trujillo, E. G., Iza Pazmiño, S. J., & Altamirano Carvajal, S. P. (2022). Fostering English vocabulary learning through gamification strategy. A preliminary study. *ConcienciaDigital*, 5(1.1), 60-78. https://doi.org/10.33262/concienciadigital.v5i1.1.1986
- Kurt, M. (2015). Which methodology works better? English language teachers' awareness of the innovative language learning methodologies. *Education*, *135*(3), 309-322. Available at https://www.ingentaconnect.com/content/prin/ed/2015/00000135/0000003/art00007#expand/collapse (20. Dec.2023).
- Maria, A. & Segundo, S. (2020). Importancia de la motivación en el aprendizaje de los estudiantes. Thesis of the Universidad Católica de Trujillo Benedicto XVI. Available at http://repositorio.uct.edu.pe/handle/123456789/676 (20. Dec. 2023).
- Moreno, P. (2017). Estudio de la actuación docente ante la desmotivación escolar. Thesis Universidad de Jaume I. Available at Repositori.uji.es. http://hdl.handle.net/10234/169946 (20. Dec. 2023).
- Mustiarini, A. T. (2021). Investigation of gamification in learning vocabulary. In *Bogor English Students and Teacher (BEST) Conference*. 2, 21-25. Available at https://pkm.uika-bogor.ac.id/index.php/best/article/view/767 (20. Dec. 2023).

- Nguyen, H. C. (2019). Motivation in Learning English Language: A Case Study at Vietnam National University, Hanoi. *The European Journal of Educational Sciences*, 6(1). 49-65. https://doi.org/10.19044/ejes.v6no1a4
- Ortega-Auquilla, D., Hidalgo-Camacho, C., Siguenza-Garzón, P., & Cherres-Fajardo, S. (2020). La motivación como factor para el aprendizaje del idioma inglés en el contexto universitario ecuatoriano: Antecedentes, resultados y propuestas. *Revista Publicando*, 7(24), 9-20. Available at https://revistapublicando.org/revista/index.php/crv/article/view/2063 (12.nov.2023).
- Peña, V. (2019). Enseñanza del inglés como lengua extranjera y desarrollo de competencias lingüísticas. *Creative Commons. 1.* 1-98. Available at https://repositorio.uasb.edu.ec/bitstream/10644/6603/1/T2833-MIE-Pe%C3%B1a-Ense%C3%B1anza.pdf (12.nov.2023).
- Pérez Cuaces, L. A. (2022). Gamificación como estrategia didáctica para la adquisición de vocabulario en inglés en la postpandemia. *Mendive. Revista De Educación*, 20(3), 867–877. Available at https://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/3004 (12. Nov. 2023).
- Pin, J., Saltos, M., and Villafuerte Holguín, J. (2023). Contributions of Digital Competencies toward the Speaking Skills in English Language Classes in Ecuadorian Elementary Schools. *Education Quarterly Reviews*, 6 (1). 490-503. DOI:10.31014/aior.1993.06.01.723
- Pinto, R. D., Peixoto, B., Melo, M., Cabral, L., & Bessa, M. (2021). Foreign Language Learning Gamification Using Virtual Reality—A Systematic Review of Empirical Research. *Education Sciences*, 11(5), 222. DOI: https://doi.org/10.3390/educsci11050222
- Purnama, N. A., Rahayu, N. S., & Yugafiati, R. (2019). Students' motivation in learning English. *PROJECT (Professional Journal of English Education)*, 2(4), 539. https://doi.org/10.22460/project.v2i4.p539-544
- Rahman, H. A., Rajab, A., Wahab, S. R. A., Nor, F. M., Zakaria, W. Z. W., & Badli, M. A. (2017). Factors Affecting Motivation in Language Learning. *International Journal of Information and Education Technology*, 7(7), 543–547. https://doi.org/10.18178/ijiet.2017.7.7.927
- Sahin, M., Seçer, S. Y., & Erisen, Y. (2016). Perception of English and Motivation in Learning English. *Journal of Education and Training Studies*, 4(9), 43-60. Available at https://eric.ed.gov/?id=EJ1104148 (12.nov.2023).
- Sanders, S. (2019). A brief guide to selecting and using pre-post assessments. Washington, DC: American Institutes for Research, The National Technical Assistance Center for the Education of Neglected or Delinquent Children and Youth. Available at https://files.eric.ed.gov/fulltext/ED604574.pdf (26. Nov. 2023).
- Semartiana, N., Putri, A., & Rosmansyah, Y. (2022, February). A Systematic Literature Review of Gamification for Children: Game Elements, Purposes, and Technologies. In *Proceeding of International Conference on Information Science and Technology Innovation (ICoSTEC)*, 1(1), 94-98. https://doi.org/10.35842/icostec.v1i1.16
- Sengkey, V. G. (2018). Student Attitudes and Motivation in Learning English. *Catalyst*, 17. Available at https://so01.tci-thaijo.org/index.php/hbds/article/view/189062 (12.nov.2023).
- Tabassum, A. and Naveed, A. (2024). Interactive strategies for Enriching English as a Foreign Language (EFL) Vocabulary: A Comprehensive Exploration. *Journal of Applied Linguistics and Language Research*, 11 (1), 1-16. Available online at www.jallr.com ISSN: 2376-760X (14. Apr.2024)
- Talia, S. & Nurkhamidah, N. (2023). Teachers'strategies to enhance young learners'motivation in learning English. *Jurnal Langue*, *17*(1), 1-20. Available at http://jurnal.pertiwi.ac.id/index.php/langue/article/view/162 (12. Nov. 2023).
- Torres Ruiz, H. M. (2022). Gamification as a pedagogical strategy to enhance students' motivation. La Libertad. UPSE, Matriz. Instituto de Postgrado. 30p. Available at https://repositorio.upse.edu.ec/handle/46000/6842 (11. Dec. 2023).
- Yaroshenko, O., Kokorina, L., Shymanovych, I., Naumovska, N., Shchaslyva, N., & Serdiuk, N. (2022). The modern principles of gamification in the teaching of English as a foreign language. *Revista Romaneasca Pentru Educatie Multidimensionala*, 14(1Sup1), 437-452. https://doi.org/10.18662/rrem/14.1Sup1/560
- Yilmaz, E., Şahin, M., & Turgut, M. (2017). Variables Affecting Student Motivation Based on Academic Publications. *Journal of Education and Practice*, 8(12), 112-120. Available at https://files.eric.ed.gov/fulltext/EJ1140621.pdf (15. Dec. 2023).
- Zambrano, L., Velez, J., & Zambrano J. (2022). Gamificación como estrategia didáctica para el desarrollo del aprendizaje significativo en estudiantes de educación inicial. *MQRInvestigar*, *6*(4), 24-45. https://doi.org/10.56048/MQR20225.6.4.2022.24-45