

Facultad de Educación

Escuela de Educación en Inglés

# ACTIVIDAD DE TITULACIÓN

The Effects of Gamification using Classcraft platform on Writing Skills in Chilean

High School Students

Trabajo de Investigación para optar al Grado de Licenciado en Educación y al Título de Profesor de Inglés para Educación Básica y Media

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# Abstract

This study, which followed action research methodology, investigated the effectiveness of gamification through the Classcraft platform to improve accuracy and performance in writing tasks and students' perception. 10 students were Tenrt of the study and replied to pre and post-test after non-gamified class, and a pre and post-test after gamified classes to compare differences in performance for both instances. Additionally, a perception survey was answered by students after non-gamified and gamified classes to gather reflections and views about both types of instruction. This research shows that gamification by implementing activities with Classcraft improves writing skills and students' positive perception of the type of activities carried out in the gamified format.

Key Words: Writing, Gamification, Classcraft, Multilevel class.

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### **1. Introduction**

Regardless of creed, ethnicity, or nationality, people worldwide need to express their ideas, opinions, feelings, and experiences in written or oral form; some people use art as a means of communication, while the vast majority use languages. Most languages require mastering four skills: reading, listening, speaking, and writing. These skills allow people to communicate with each other in different ways. Writing is one of the skills that any language speaker should have. Chandra and Satya (2018) state that writing is a cognitive activity related to expressing ideas non-verbal. "It is the system of written symbols, representing the sounds,

syllables or words of the language, with different mechanisms - capitalization, spelling and punctuation, word form and function" (p.1). Even though the writing is an essential skill to acquire, people still have difficulties mastering it. Huy (2015) states that writing is a complex metacognitive activity that draws on an individual's knowledge, an essential skill, strategies, and ability to coordinate multiple processes. Students in Chile experienced difficulties in writing skills development. According to MINEDUC (2020); By the time students finish eleventh and twelfth grades, they are expected to show the principal comprehension of the information they receive in the English language to writing skills that affect high school students in Chile managing effective communication in the diverse terms in which they interact. However, based on the English 2014 SIMCE (Agencia calidad de Educación, 2014), 24.5 % of students obtained the English A2-B1 certification, and 75.5% did not obtain the English certification. This evidence shows that Chilean students are not reaching those results because based on the National Curriculum and the textbook available to teachers and students on MINEDUC's official webpage, high school students should have a B1 level of English. However, only a quarter of the students reached that level.

Additionally, to provide some teaching guidelines, the education ministry establishes learning objectives called "OA," which the teacher aims to achieve depending on the skills and content. These "OA's" are related to the Can-Do-Statements, the communicative functions that the students develop in classes. These learning objectives are the same for each grade but will depend on the grade's content which part of the learning objective the teacher will use. For example, guided by MINEDUC in 9th and 10th grade, the 14th learning objective, "OA' that is related to writing skills, establishes that students should be writing a variety of texts, such as, stories, emails, pamphlets, descriptions, letters, and journals, using the writing step process (organize ideas, write, revise, edit and publish). As well, in 11th and 12th grade, the third learning objective that is related to the writing skill establishes that using the knowledge of English in comprehension, students should be able to produce brief and clear written texts, with the purpose to build thinking in contexts related to student's fascinating and inquisitiveness. Although the previous suggests that these grades have to use grammar, try to cover much content, including the grammar. That is not possible because based on the classroom experience there are many factors such as time, level of English, students' pace of learning, and motivation to write.

This last factor is the most remarkable nowadays because motivating students to write through teaching writing skills has always been a subject of care.

Writing skills are directly related to grammar, punctuation, genre, context, and capital cases. Students must learn grammar structures and appropriate punctuation to use them accurately in short compositions required in the learning objectives throughout the school years. The quandary is that students have difficulties acquiring the competence of writing accurately, specifically grammar structures and appropriate vocabulary due to the several grammar rules. Reigstad (2008) supports this by mentioning that writing remains the most important English language skill. Also, Myles (2002) argued that writing is a complex language skill learned by instruction. Writing requires a set of practices in formal instructional settings. Eming (1978) adds that learners need to develop writing skills to reinforce grammatical structures, idioms, and vocabulary. However, it also allows communication through different mediums using the appropriate linguistic skills. Regardless of problems, students must develop this skill, and teachers need to find a way to help students face writing tasks.

In 2017, Agencia de Calidad de la Educación, a public service part of MINEDUC, evaluated and guided the education system to improve the quality of Chilean education. As part of their tasks, they conducted a national study that showed the level of achievement in English in listening and reading skills among high school students in Chile and reveals that the entire group of the sample was classified as for beginners, basic and intermediate, the results were, Beginners (A1) 68%, Basic and Intermediate (A2 and B1) 32% ". As can be seen from the results, most students reached a Beginners level (A1). Perhaps this was due to outdated teaching strategies and methodologies that mainly focus on a more traditional teaching style. Besides, teachers who do not develop writing skills are not evaluated in this national test.

These results also seem to validate those students in Chile face difficulties when it comes to writing in academic and real-life situations. The conventional lecture methods emphasize learning grammatical rules of language rather than the language itself, primarily when teachers depend on textbooks, making the students memorize information and other aspects of the subject, which sometimes makes students not pay attention to the class. That is why the conventional methods witness that the students prefer not to do written production in practice. The factor implied in this is that most teachers do not do writing because it implies correcting drafts for 4 to 6 classes, which increases their workload.

Nowadays, teachers have to deal with more things besides grammar in this technological era. Students are constantly bombarded with distractions due to cell phones, the internet, and video games. This fact affects students who lose interest in anything not on a screen; even more, if the teaching methodology focuses on grammar rules, educators must find a way to gain students' attention and motivate them to produce and create little excerpts from texts. Generally, in Chilean reality, as previously established by the Agencia de la Calidad de la Educación (2017), students do not have the expected level of the target language at their age, which affects their production and their attention to class. That is why it is valid to investigate how

teaching writing skills attract students' attention. One of the manners to accomplish this is gamification which lets the student have a flexible learning process. However, gamification is related to including game features into a non-gamified environment; therefore, what effects does gamification have on the development of writing skills, and how do students' perceive gamified classes versus non-gamified classes?

#### **2. Theoretical Framework**

#### **2.1.** The importance of writing

As has been mentioned before, writing skills are directly related to grammar, punctuation, genre, context, and capital cases since students must learn grammar structures and appropriate punctuation to use them accurately in short compositions required in the learning objectives throughout the school years. However, the quandary is that students are having difficulties acquiring the competence of writing accurately, specifically grammar structures and appropriate vocabulary due to the several grammar rules as studies realized by Agencia de Educación (2017) showed that students are not reaching the expected level of the target language at their age.

Ozdermir and Aydin (2015) argued that language could be divided into two principal skills; receptive and productive. Receptive skills are listening and reading. Here students do not have to deal with the production of language. On the contrary, in productive skills, which are speaking and writing, students should produce oral and written texts in the target language in terms of spoken and written production. Writing is a fundamental component of language. When a child writes, thoughts and knowledge are blended, creating a unique meaning (Jones, Reutzel, & Fargo, 2010). This skill is relevant because students develop their skills to write meaningful sentences, lines, and paragraphs. "Moreover, writing also facilitates a person to think better. When a student learns how to write, he or she becomes more capable of analyzing what they read, interpret and think." (Cdadmin, 2020). There are many advantages to developing writing skills, which help them have better communications skills, increase creativity, improve focus, and make connections with thoughts, knowledge, and what students want to express. Cdadmin (2020), also states that writing goes beyond school purposes. In the business field, candidates are required to write and communicate effectively.

Still, the digital age has not reduced the need for writing. Email, online chat conversations, faxes, or website updates; all require excellent writing skills. Considering that writing is an ability that always is needed to use, in terms of English, this is going to help the students to express their ideas in this language, establish a productive written communication by email, blogs, or also as something for leisure, such as commenting on videos, post or images in the social media.

Even though writing and other language skills are essential to master studying English (Zuhri Dj & Sukarnianti, 2015), students need much time and great willingness. Many students do not know the importance of writing skills, so they spend little time practicing. The previous is because writing is considered the most complex and challenging language skill to be learned compared to other language skills (Iratawi, 2015) also Nunan (1999) argued that learning to write fluently and expressively is the most difficult of four language skills for all students three whether it is for first, second or foreign language students. Writing is a complex process that involves different planning, drafting, and editing; as a writer, one must quickly learn new concepts and translate ideas into original content (Indeed Editorial Team. 2021, June 9th). Writing is complex because it requires students to organize ideas that make sense to the reader while following punctuation guidelines and appropriate grammar structures. Nunan (1999) emphasized that the most challenging thing to learn a foreign language is to produce a fluent, coherent, and extended piece of writing.

The development of language skills affects a person's productive ability. Several studies have demonstrated that personal success in disciplines is strongly related to a person's writing ability and depends on good writing skills (Cho and Schunn, 2007). Other problems found in the teaching and learning of writing are: Writing lacks ideas, organizing of ideas, rhetoric or pattern of thought, cohesion, and coherence (Nurhayati, 2016). Many students make many mistakes in writing English, especially using prepositions, verb tenses, and grammar structures (Huy, 2015). Although writing is challenging to master, there are problems with mastering this skill because producing a fluent, coherent, and extended piece of writing without lacking ideas. The previously mentioned means that teachers have the challenge of changing this panorama by implementing more appropriate teaching techniques to teach writing. One of these techniques is Gamification.

#### 2.2. Gamification

Teaching has never been easy, and every day is getting more complex since each new generation of students faces many distractions as part of technology advances. One of the most noticeable effects of technology on children is games and video games. In Chile, more than half of children between the ages of 8 and 14 wake up in the morning. They are already connected to the internet before having breakfast. The previously referred to is shown by a survey carried out by VTR. Of 3,300 children the 52% of children are connected to the internet as early as seven in the morning. The most striking figures have to do with children's use of this connection. 40% of children between 8 and 14 years of age spend more than three hours a day online, and 70% of nine years old already have their cell phone (Corvalan, 2019).

Until recently, games based on physical activity in more open spaces have been replaced by the digital world's possibilities (Hazar, Tekkursun Demir & Dalkiran, 2017). In this search for a successful method to keep students focused on learning and help teachers accomplish it, in this scenario appears gamification, which is to integrate features of games into a formal education setting because a wellorganized gamified experience can provide a new way to improve learning and motivation in students and make it an entertaining task.

The term gamification is generally used to describe the process in which one integrates aspects of play into a situation that is initially not playful (Sanchez, E., Young, S., & Jouneau-Sion, C. 2017), As Khaled, Nacke, and Dixon (2011) also mentioned that gamification utilizes game components, structure, and game mechanics in non-game settings. Gamification can be used to motivate and raise students' learning outcomes, catch the students' attention, and offer them the opportunity to experiment with emotions, social roles, and rules. Lee & Hammer (2011) supported when they said that gamification might be able to motivate students to learn better and to care more about school; due to an active job that seems not to be a job or a task, it makes it more bearable and more attractive to be done; being more entertaining and didactic, taking away the "boring" part of a work.

Students can also use gamification to identify themselves as scholars by playing the game publicly. Academic achievements that may otherwise go unnoticed or even ridiculed by other students might gain social legitimacy and respect through the game. The instructor can offer recognition, but gamification allows pupils to reward with in-game cash. Students are encouraged to promote the formation of a school-based identity in other students and themselves, thanks to this design. A welldesigned gamification system can assist participants in taking on essential learning responsibilities. We can help youngsters think differently about their potential in school and what school may mean for them by building a new identity, fun and rewarding it properly.

Moreover, during the past years, gamification has taken more boom, from using new methods to learn or perform daily tasks such as studying and working. The prolonged time in front of computers to carry out these tasks increased, resulting in more virtual than real life. Lee & Hammer (2011) "Games and game-like elements have begun to invade the real world.". For this reason, the use of games is becoming almost an obligation when conducting classes in virtual mode, even in face-to-face mode, since the same students ask to carry out the activities on their phones, tablets, or computers. Use gamification in favor of developing learning. Nowadays, new technologies are a great resource that should not be ignored during the teaching-learning process. They offer a wide range of resources for dynamizing the classroom and fostering students' motivation (Gómez-Gallardo & Macedo-Buleje, 2010). For example, associating digital gamification with the writing process provides an active classroom environment and improves creativity (Hibbard, 2015). It encourages students to be open to innovation (Cahyani, 2016); develops problem-solving skills (Gee, 2013; Kapp, 2012; Kayalı & Yilmaz, 2017; Ozer, Kanbul, & Ozdamli, 2018; Urh, Vukovic, & Jereb, 2015); supports collaborative learning (Buchinger & da SilvaHounsell, 2018; Halloluwa et al., 2018; Sánchez-Martín, Cañada-Cañadave,& Dávila-Acedo, 2017). In addition, the students are motivated to write (Gee, 2008; Kingsley & Grabner-Hagen, 2015; Lam, Hew, & Chiu, 2018; Olson, 2010; Ozer, Kanbul, & Ozdamli, 2018).

Many platforms can be used for didactic teaching and gamification. For example, Canva, which is a graphic design platform that allows everyone to create didactic material easily and lesson plans; LMS Cambridge, which is the platform that allows teachers to interact with their students and track their progress; and Kahoot, a game-based learning platform that creates fun trivia activities. Another is *Classcraft*, in which the player has more options to develop the learning at his or her own pace, customizing their avatars and receiving personalized feedback every time.

### 2.3 Classcraft

One of the tools that follow the principles of motivation and engagement in the classroom that has got the attention of different educators recently is *Classcraft*, a virtual platform available as a mobile and web application where teachers can sign up students, assign an avatar to every student and points and powers based on different aspects such as, missions (activities and homework) and classroom conduct (Sanchez, E., Young, S., & Jouneau-Sion, C., 2017).

The objective of *Classcraft* is to transform the classroom into a role-playing game for the duration of the school year. For the teacher, the point is to foster desired behavior in students (Sanchez, E., Young, S., & Jouneau-Sion, C., 2017). More than "foster desired behavior in students," this project is going to be focused on the progress of the students in terms of knowledge and participation that this platform can provide, and this is one of the reasons why this research is going to use *Classcraft* as a tool for writing skills development. The flexibility and adaptation that *Classcraft* possesses are something to notice and consider during this project's application. What can be said about this platform is that it can be used online. The use of the internet is relevant for its use; also, the state or the rules of this game can be modified according to the teacher's necessities and expectations. The students can work individually or in groups of four to seven. The teacher can leave tasks on the platform, but the students will gain experience points and coins that can be used to

get better armors, tools, or get a level up. Also, the rules that the teacher establishes, depending on the necessities of the students, can provide more experience points; otherwise, the platform can subtract points, but the purpose of this platform is that the students help each other as a team, as classmates and to share their experience during the class, and that is one of the goals that is the aim of this project.

To the same degree, personalized learning is one of the many benefits of *Classcraft*. Thanks to "Quests," which in simple words are the missions that students must perform to pass to the next level. *Classcraft* offers that everyone needs to teach to students; this takes place in an interactive map with the activities or resources as the missions to complete. Each student has his or her preference, and it is not easy to create a plan based on each student's needs, so it is done at the course level. That is why Quests are gamified, personalized, and have self-paced learning. Quests manage to adapt to each student's needs and pace. Feedback is received individually, and the students advance according to their needs, thus having better results in engagement and achievement.

*Classcraft* is a platform that can only be used online. The teacher can manage and control the student's progress, both synchronous and asynchronous. Also, at the end of each class, since this research is going to begin, the students will be tested with self-reflection questions and questions about the class, whether the content was accessible or not content studied; those answers will be fundamental to the results of this research. To highlight is that students' writing skills are fundamental to their development and knowledge of English as a second language.

## 3. Research objectives

General objective:

Determine the effects of gamification on writing skills using the *Classcraft* platform in Chilean high school students in remedial EFL classes.

Specific objective

1. Identify students' level of accuracy in writing tasks in gamified and non-gamified classes.

2. Compare students' performance in writing tasks before and after gamified and nongamified classes.

3. Analyze students' perceptions about gamified and non-gamified classes.

Research question

What effects does gamification have on the development of writing skills, and how do students' perceive gamified classes versus non-gamified classes?

### 4. Methodology

The methodology of this investigation is mixed methods because and according to Wisdom & Creswell (2013), the "integration permits a more complete and synergistic utilization of data than do separate quantitative and qualitative data collection and analysis." Therefore, using a mix-methods will make the investigation broader and more efficient. One of the methods is quantitative research, which is a systematic investigation that collects information to analyze and measure it. According to Allen (2017), this kind of research aims to generate knowledge and understand a topic. The instruments used in this research had a pre-test and a post-test to measure writing skills. The other method was qualitative research, which explores and provides insights into real-world problems (Moser, 2017). Qualitative research helps to generate hypotheses and gathers and understanding participants' experiences, perceptions, behavior, attitudes.

Moreover, this type of research answers the "how" and "why," generating non-numerical data instead of numerical information as it happens in quantitative research. Qualitative research allows researchers to know about participants' experiences or what they are thinking and feeling during the study, providing new aspects. Qualitative and quantitative approaches are different. They are not necessarily opposites. They are certainly not mutually exclusive; a mix of these methods can provide data in numbers and opinion. This study will be conducted in a school setting; as part of the regular activities of the English subject, the most appropriate method would be Inaction research which best suits the present study's purposes as it is an approach commonly used by education professionals and practitioners to improve their pedagogy practice. In this way, action research represents an extension of the reflection and critical selfreflection that an educator employs daily in their classroom (Clark, Porath, Thiele & Jobe, 2020). Also, Wallace (2006) supports the previous definition adding; action research is a form of systematic investigation that practitioners can control and implement to improve their practice. The practitioner becomes the researcher of his practice in the classroom. This research will be carried out as part of a pre-service training at a Chilean school located in the province of Santiago, where students from a multilevel remedial class where trained teachers realize students could improve their writing skills by gamification.

## **5.** Sample and Sampling

The sample corresponds to a convenience sample since this is the group assigned by the school. It is a multilevel remedial class of 20 students from 9th to 12th grade, whose ages range from 14 to 18 years old, and who are part of a remedial course or want to improve their English level. This class is one hour long and takes place every Thursday. Since the implementation of Emergency Remote Learning and people's restrictions in enclosed locations, these classes are online and synchronous. This means the study may be biased because individuals who choose to participate in a study may not fully represent the population from which the sample has been drawn (Burns & Grove, 1977; Cochran, 1977; Freedman, Pisani, & Purves, 1997). Although, as Moore (2001) says, convenience samples use voluntary participation, which is the case of this multilevel class, this fact increases the probability of research to recruit those individuals who feel strongly about the issue in question and may favor specific outcomes.

### 6. Data collection methods

For this research, three data collection instruments were created. One is a pretest (See Annex 1) to assess writing accuracy taken before the non-gamified classes, the second is a post-test (See Annex 3) taken after the gamified classes, and the last is a perception survey taken in 2 steps (See Annex 2), firstly after the two non-gamified classes, secondly after the two gamified classes to analyze the students' perceptions about gamified and non-gamified classes.

The first was a pre-test that will take at the beginning, which focuses on the diagnosis. Then, at the end of the intervention, a post-test focused on the content learned; hence, these tools define if the objectives were achieved. One of the tools used was a pre-test to assess writing skills which contained three different items, filling the blanks with present and past verbs, completing a verb chart, and finally, an item where students had to write a short paragraph about 'what they usually do" and another about a past event. The second one was a perception survey to obtain students' perception of the classes; this survey was focused on questions of self-reflection of each class. The question was the following:

English	Spanish
1.How did you feel in today's class?	¿Cómo te sentiste en la clase de hoy?

2.What do you think about today's	¿Qué te pareció la clase de hoy?
class?	
3. Did you like today's activities? why?	¿Te gustaron las actividades de hoy?
	¿por qué?
4.What would you change about	${}_{\grave{c}} Q$ ué le cambiarías a la clase de hoy?
today's class?	¿Qué sería?
5. How did you feel about the last two	¿Cómo te sentiste en las últimas dos
classes?	clases pasadas?

The perception survey was applied from every two classes. First, it was applied at the end of the second non-gamified class, and the second one will be applied at the end of the second gamified class.

## 7. Data Analysis

The teacher graded the pre and post-test using a grade scale per every item in the pre and post-test; students were re-named as student one to student ten. Then the results were transformed into percentages to have an accuracy percentage for every student and obtain a performance average. Then those percentages were compared with the result from the post-test in this way obtained the accuracy percentage differences and if students improve, maintain, or decrease their development through the process.

The surveys were answered individually by every student who was part of the process; they answered open-ended questions; these questions were analyzed individually and coded according to most outstanding issues; another way is comparing the answers from students between non-gamified and gamified surveys.

# 8. Procedure - Phases of research

This study was conducted over four weeks, in 2 stages.

As shown in figure 1, the study centered on four remedial course classes. The first two classes were non-gamified, and the following two classes were gamified using the *Classcraft* platform.

### Stage 1:

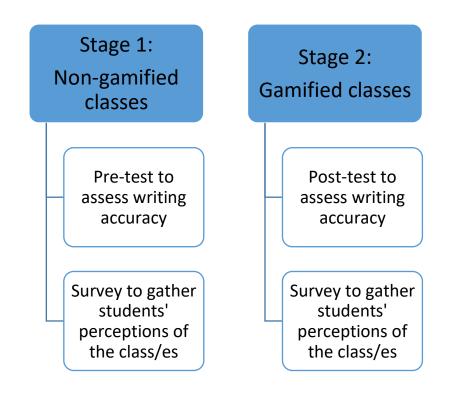
Before starting the first non-gamified class, a pre-test was performed to measure the students' knowledge and writing skills. Along with perception, formulary to know about the student's perception regarding the class and activities; This stage was based on two non-gamified classes aimed to improve writing skills through everyday activities. Students answered the perception formulary at the end of the second non-gamified class.

Stage 2:

In the next step, two gamified classes used the *Classcraft* platform, which contains gamified activities and autonomous tasks. Finally, students answered the perception formulary at the end of the second gamified class.

Concluding the second stage, a post-test was performed to measure the effectiveness of the gamified methodology in writing skills in this period. Consequently, the researcher was able to compare and analyze the results of the two stages.

fig.1



#### 9. Results

From the 20 students, ten students (50%) participated from the beginning to the end of the process, who made the pre-test and post-test and the post perception survey. Students from the multilevel class were classified by number one to ten, respectively, to protect their identities.

The results obtained in general terms support the objectives of this research in which gamification can improve the level of accuracy and performance in writing skills of the students in these multilevel remedial classes. Figure 3 shows that the students tend to improve on average with an 8,43% improvement compared to the pre and post-test results. Furthermore, some students maintained their performance and achievement regarding the post-test, and finally, none of the students got a worse performance. The previous result can be reflected in Lee & Hammer (2011) supported when they said that gamification makes tasks, in general, more bearable and more attractive to be done, is more entertaining and didactic, taking away the "boring" part of a work.

Figure 2 shows that in the pre-test, the lowest percentage of achievement was 53%, there were five students in the range of 72% and 79% of achievement and three students in the range of 84% and 95% of achievement, and only one student achieved 100%. The majority of mistakes were in the use of verbs, especially in the third person in the case of present simple and the past simple the use of irregular verbs.

Fig. 2

	PRE-TEST	
	Score	Percentage
Students		
Student 1	18	95%
Student 2	14	74%
Student 3	19	100%
Student 4	14	74%
Student 5	16	84%
Student 6	15	79%
Student 7	15	79%
Student 8	14	74%
Student 9	10	53%
Student 10	16	84%
Maximum Score	19	100%

Figure 3 showed students' significant actual improvement by the end of the course as measured by the criteria assessing their writing. There were three students in the range of 72% and 79% because the rest improved their mark achievement to 84% of the total of the post-test, and most importantly, 100% of achievement was possible for two students.

Fig. 3

	POST TEST	
	Score	Percentage
Students		
Student 1	19	100%
Student 2	15	79%
Student 3	19	100%
Student 4	16	84%
Student 5	16	84%
Student 6	18	95%
Student 7	15	79%

Student 8	18	95%
Student 9	15	79%
Student 10	16	84%
Maximum Score	19	100%

In specific terms, the students who improved their achievement were:

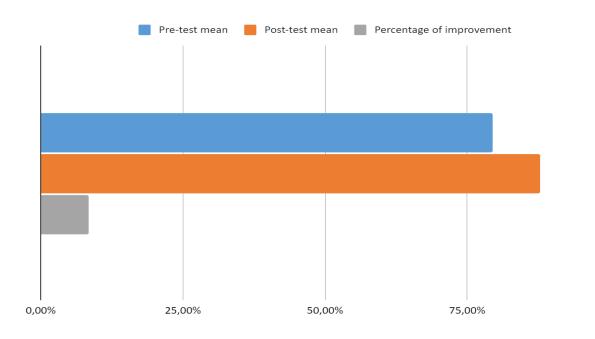
Student number one had an improvement of 5%.Student number two had an improvement of 5%.Student number four had an improvement of 10%Student number six had an improvement of 16%Student number eight had an improvement of 21%Student number nine had an improvement of 26%

Figures 4 and 5 show the average percentage of achievement in the pre-test was 79,47% and in the post-test was 87.90%. It was an improvement of 8,43%, demonstrating that students could improve their writing skills using gamification in their classes.

Fig.4

Pre-test average	Post-test average	Percentage of
		improvement
79,47%	87.90%	8,43%

Fig.5



In the perception survey, the answers were quite positive and similar regarding non-gamified and gamified classes in general terms. However, in the postgamified classes survey, students express more, giving longer answers, implying their preference for gamified classes. In general terms, students relish the gamified classes more than the nongamified classes; this is because, in some of the answers of the perception of the nongamified classes, the answers indicate that students found the classes difficult in comparison to the gamified classes which the answers indicate the class was entertaining and they liked the games.

In question one, 'How do you feel in the class today?' in the non-gamified classes, students' average answers were "normal," good," "ok" comfortable" on the contrary, in gamified classes perception survey, the average answers were "happy," "curious" "happy" good I had fun" very comfortable and happy." The previous answers show that the answers were more enthusiastic in the answers of the non-gamified classes.

In question two, "What do you think about today's class?' in the non-gamified survey, the answers were "*intelligent*," "*normal*," "*it was ok*" *difficult*" in the gamified classes the some of the answers were "I learned a lot" "*interesting and entertaining*" "*I like it a lot*" this shows that the answers were more relating to the fun of play a game and excitement.

In question three, "Did you like today's activities? why?" In the non-gamified student survey, *five* answers were *"fun"* yes, but students 7, 9, and 10 expressed that they had some troubles related to the difficulty of the activities with answers such as; *'yes, but in the activities, I got confused with too many new words.* On the other hand, in the gamified classes, the answers were "*yes because it is a new way of* 

*learning," "yes because I learned differently and had fun," "Yes, I liked it due to the games"* these answers clearly show a preference for the gamified classes in which the students had much fun and learned with a different method than the regular classes.

In question four, "What would you change about today's class?" In the nongamified survey, students generally answered *'nothing.'* However, student four asked to have *"more fun activities." However, after* the gamified classes, his answer to the same question was, "Nothing, I found it well executed and accurate in dealing with teenagers who may or may not get bored. "

In question five, "How did you feel in the last two classes?" In the nongamified classes, the most repeated answer was "good" or how students felt "comfortable" on the contrary, in the perception survey about gamified classes, for example, student five answered;

> "I don't remember the past classes very well. However, I found all the classes in the English workshop to be successful. They are interesting because they are videos of series or video games, a page of games with characters, a good choice."

Student 9 answered "super good, it was really fun that we used games for the classes." Showing a preference around students to the gamified classes and Classcraft.

This evidence that *Classcraft* is innovative and fun for the students, as their answers reflected in creating the character in which the student will develop the activities, was something new for them and learning through games.

Also, as is mentioned before, gamification and the use of *Classcraft* encourages students to be open to innovation (Cahyani, 2016); develops problem-solving skills (Gee, 2013; Kapp, 2012; Kayalı & Yilmaz, 2017; Ozer, Kanbul, & Ozdamli, 2018; Urh, Vukovic, & Jereb, 2015); In addition, the students are motivated to write (Gee, 2008; Kingsley & Grabner-Hagen, 2015; Lam, Hew, & Chiu, 2018; Olson, 2010; Ozer, Kanbul, & Ozdamli, 2018) As it was experienced through the gamified classed and showed in the perception survey where students tend to express their preference in gamified classes.

### **10. Discussion**

In this investigation, the objectives aimed to demonstrate a progression in the performance of writing skills, comparing non-gamified and gamified classes. The obtained results indicate that students tend to progress and increase their performance with the gamified classes, comparing the results with the tests of non-gamified classes. Something that it is necessary to consider is that there are external factors that influenced this research, such as Covid-19 pandemic, connectivity problems, or flexibility with the multilevel remedial classes, which the students participate in because they want and not as an obligation likewise the classes of the academic year, these factors had made that in this investigation cannot declare the gamified classes as a fundamental methodology. However, it is for sure that can make a difference in the teaching experience of the students. Besides all these, the results can be taken and applied in different contexts, as long as the teachers or researchers can build an environment where the technology and the games can be used as instruments for their students. Below, it will provide an analysis of the specific objectives of this research.

1. "Identify students' level of accuracy in writing tasks in gamified and nongamified classes". Ozdermir and Aydin (2015) argued that language could be divided into two principal skills: receptive and productive. This research was established writing production as a productive skill; with this classification was possible to establish the level of accuracy in writing tasks; for that, the students did a pre-test applied before non-gamified classes, and a post-test applied after gamified classes. These tests were taken and measured into percentages to analyze the progression performed as presented in fig.5. In general terms, the students tended to increase their earliest percentage of accuracy, 8,4% of improvement; therefore, it is possible to establish that the use of percentage during this research helped identify each student's level through the tests applied. However, it is essential to note that these results cannot be considered absolute. "The key idea is to increase people's motivation to make a certain decision or carry out certain tasks that are instrumental in achieving valuable goals, while making them enjoyable and rewarding experiences... In terms of general knowledge, our results are in line with some previous studies [79–82] that found that gamified learning led to an improvement in students' overall academic performance. This improvement stemmed from students' enjoyment, participation, and satisfaction with the online gaming process." Zhang, Q. (2021, 20 noviembre). For identifying the level of accuracy, it is important to say that in those two researchers was applied the same methodology, and it is possible to identify that when the class's environment is enjoyable, the outcome of the students tend to increase.

2. "*Compare students' performance in writing tasks before and after gamified and non-gamified classes*". In terms of performance of writing skills, this research demonstrated that the students had made progress in their marks; this can be declared considering the percentages of the pre-tests and the post-tests applied (figure 2 and figure 3). Also, after applying the post-tests of the

gamified classes, the results provided indicate two main points, the first one is that the students indeed progress in the performance, and the second one is that they stay at the same level, but none indicate a regression, according to Khaled, Nacke and Dixon (2011) Gamification can motivate and raise students' learning outcomes. Another factor that needs to be considered in the performance of the writing skill, since either pre-tests or post-tests applied were designed to make the students perform their writing skills with the same level of requirement. Summarizing this part of the research, it is possible to conclude that these tools (pre and post-tests) help the researcher establish an accurate level of the students with the writing performance.

## 3. "Analyze students' perceptions about gamified and non-gamified classes."

Unlike the previous specific objectives analyzed, which were focused on the academic performance of this research, this specific objective was designed to consider the emotional part of this and make notorious how the students could feel during the applying of the classes non-gamified and gamified. The results of these tests in the non-gamified classes, the students expressed that the classes were "ok," "normal," they did not present greater significance in terms of their learning. In contrast, the students showed greater significance in the gamified classes since they found the classes more entertaining and didactic. Lee & Hammer (2011) supported this when they said that gamification might motivate students to learn better and care more about school. Concluding that,

along the same lines, there was a change in student perception between gamified and non-gamified classes.

### **10.1 Limitations**

One of the limitations presented in this investigation was the attendance, and the investigation started with twenty students in the virtual classroom. During the realization of this remedial course, the number of students varied considerably; since the course was a workshop, attendance was not mandatory, so students could decide whether or not to attend. At the end of this research, the number of students was ten students. These ten students were the ones who attended the four research classes, including the pre-test and post-test.

Another problem presented in this investigation was the time needed to carry out this research because it was a short period to develop all the objectives fully. At the end of this research, an extension of time was almost necessary to have more accurate results. Also, the students needed to spend more time on the platform.

## **11. Conclusion**

Our study reports on the use of gamification and the effects determined in this investigation showed an improvement in students' writing skills using gamification through the *Classcraft* platform in the remedial classes.

The previous results were evident in the post-test results, in which the students obtained a better mark compared to the pre-test. The results show that the students tend to improve on average with an 8,4% after the gamified classes compared to the non-gamified classes.

Gamification has shown that changing the traditional teaching/learning process into an innovative and exciting method to the students. They are the protagonist of the class by learning at their own pace and interests. The previously can be shown in the investigation by how the students' perception of this process was. Clearly, they show a tendency to the gamified classes in which the teaching methodology was interesting for the students and the activities, satisfaction with playing the game was significantly associated with improvement of writing. Teachers and future teachers should include in their teaching methods gamification in which students feel free to make mistakes and have fun at the same time.

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## 13. Annex

### **Pre-test**

Item l. Complete the following sentences with the correct verb form.

- 1. Yolanda ..... to work by bus every day. (go)
- 2. Marta ..... to music all day. (listen)
- 3. Yesterday, I ..... television all day. (watch)
- 4. Benjamin ..... pizza last week. (eat)
- 5. We ..... soccer yesterday. (play)
- 6. They ..... their mockup of Eiffel's tower in the classroom. (forget)
- II. Complete the following table with the correct verb form.

PRESENT	PAST
GO	WENT
CLEAN	
	ATE
WAKE	

Item lll) Write down in the box a paragraph with a minimum of three lines, with things that you usually do in your daily routines.

 1.

 2.

 3.

Item IV) Write down in the box a minimum of three lines, what did you do last weekend.

1. 2. 3.

# Cuestionario de percepción de clases.

- 1. ¿Cómo te sentiste en la clase de hoy?
- 2. ¿Qué te pareció la clase de hoy?
- 3. ¿Te gustaron las actividades de hoy? ¿por qué?
- 4.¿Qué le cambiarías a la clase de hoy? ¿Qué sería?
- 5.¿Cómo te sentiste en las últimas dos clases pasadas?

### **Post-test**

- 1) Complete the following sentences with the correct verb tense.
  - 1. Fernanda..... to school by bus (go)
  - 2. Marta ..... to play guitar all day. (play)
  - 3. I ..... television last night. (watch)
  - 4. Benjamin ..... pizza last week. (eat)
  - 5. He ..... the school yesterday (left)
  - 6. I..... a sudoku every morning (do)

## II. Complete the following table with the correct verb form.

PRESENT	PAST
GO	WENT
ТАКЕ	
	ATE
WAKE-UP	
	LEFT
	DID

Item III: Answer the following question. In a short paragraph (more than 4 lines).

• <u>What do you usually do in the morning?</u>

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Item II:

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Answer the following question. In a short paragraph (more than 4 lines).

• What did you do last summer?