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GAMIFICATION: A METHODOLOGY TO TEACH VOCABULARY

Tesis para obtener el grado de magister

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ABSTRACT

The current research intended to assess the effectiveness of a card game created by the researcher to teach vocabulary by following the guidelines provided by the methodology known as gamification. The study was conducted by following quasi-experimental model with an experimental and a control group and it was applied in a single gender (girls) subsidized institution. The participants were 13-14 years old students in two 9th grades (primero medio) who work with an external company that provides them material to design the subject of English in contrast to most subisidized schools in Chile that receive the material from the ministry. A mixed-method approach was used to collect data and analyse the results of both the quantitative and qualitative aspect. As for the instruments, the research used Paribakht and Wesche's (1996) Vocabulary Knowledge Scale, an Oxford Quick Placement Test, an immediate and delayed passive recall and passive recognition test, the card game, and a semi-structured interview to collect data from the participants. Concerning the quantitative aspects, the results were inconclusive as the results of the control and experimental group were not statistically significant. With regard to the qualitative aspect, the results permitted to successfully know the perceptions and preferences of the participants towards the methodology.

El presente estudio tuvo como objetivo evaluar la eficacia de un juego de cartas creado por el investigador a cargo para enseñar vocabulario en inglés siguiendo los lineamientos de la metodología conocida como gamificación. La investigación se llevó a cabo utilizando un modelo cuasi-experimental con un grupo experimental y un grupo control y fue aplicada en un clegio de

administración subvencionada de un solo género (mujeres). Las participantes fueron estudiantes de entre 13 y 14 años de edad pertenecientes a dos primeros medios que trabajan con una compañía externa que les provee el material de estudio en contraste con otras escuelas subcidiadas que reciben el material que otorga el ministerio. El método mixto de investigación se utilizó para la recolección de data y su posterior análisis de resultados de orden cuantitativo y cualitativo. En relación a los instrumentos, el estudio utilizó la Escala de Conocimiento de Vocabulario de Paribakht y Wesche (1996), un test de posicionamiento rápido de Oxford, dos pruebas inmediatas y tardías de reconocimiento pasivo de vocabulario y recuerdo pasivo de vocabulario, el juego de cartas y una entrevista semiestructurada para recolectar información de los participantes. Los resultados del aspecto cuantitativo no fueron concluyentes al no ser estos significativos estadísticamente, en contraste con los resultados cualitativos que lograron evidenciar las percepciones y preferencias de los participantes.

1. INTRODUCTION

1.1. BACKGROUND OF THE STUDY

Gamification is understood as the implementation of gaming aspects such as competition, evolution and learning based on a reward system (Deterding, 2012) in non-gaming environments. Gamification has been applied in several contexts that concern areas such as commerce, business, health, informatics, and education with the purpose of enhancing the experience of the user by learning through an interactive and dynamic strategy. The methodology concerns a system of rules and stages that are followed so the participants of a given context learn something pertinent through discovery, competition, and evolution. Specifically, the objective of the research is to implement the gamification methodology in an common Chilean educational field in which English is taught the usual three to four hours a week with the purpose of increasing the vocabulary learning among EFL school learners and exploring the implications of motivation, situational interest, intentional vocabulary learning, and vocabulary retention.

The following research was developed with the objective of providing a creative, teacher-made, easy to craft and didactic tool with the objective of enhancing the vocabulary learning process of students in an EFl context. The Chilean national curriculum for public schools concerns specific rules for the delivery and organization of contents (updated information until 2019, year in which the curriculum changed); it comprises the development of all four skills from kinder to “cuarto medio” which are covered in a time frame of two to three hours a week. The contents are divided in four units that deal with different topics that aim to spark interest amongst learners and are meant to be developed by following forty eight objectives within a year. Although the objectives and the curriculum propose a series of activities to practice

contents and, specifically, vocabulary, they are restricted to the use of worksheets and the institutional copybook provided by the government.

The research was conceived by taking into account, mainly, two ideas; firstly, the perception of English teaching reality and characteristics in Chile that is typical of a classic EFL setting, namely, few hours of English a week, much input from the teacher, few instances for authentic practice, and simulated activities in the classroom that aim to mimic real life instances. Secondly, the effectiveness of learning English naturalistically versus classroom instruction. The first setting is typical of English as a Second Language (ESL) instruction in which the students have more hours of English a week, are exposed to more realistic and practical practical instances, and, all in all, will eventually use English in a real life context by need. Furthermore, Dewaele (2010) empirically discovered that the naturalistic experience "resonated for years after the end of the active learning phase" (p. 119).

According to the results that Agencia de Calidad de la Educación obtained from measuring different Chilean students' performances based on socioeconomic backgrounds and hours of English a week through the Estudio Nacional de Inglés (2017), most public school students are considered low as they achieved an average of 51 points out of 100, whilst the percentage of students who achieved the basic and intermediate levels was 32%.
With regard to socioeconomic categories, the same study concluded that 85% of high income studies achieve the basic and intermediate levels, whilst just 9% of low income students accomplished the basic and intermediate levels. As for gender considerations, 30% of females and 32% of men reach the first two levels of proficiency.

What differentiates both settings is the emotional factor that is present in the naturalistic instances and that has an impact on the motivation students professes towards a task. Dewaele (2010) discovered that his respondents "did claim that their later-learned language came to feel emotional with extensive use in an immersion context" (p. 119), to which Caldwell-Harris (2012) agrees based on her own interviews in which she concluded that participants felt more confident and were able to remember more words in a naturalistic environment as they were more emotionally engaged in the process.

1.2. CONCEPTUAL FRAMEWORK OF THE STUDY

Gamification is understood as the implementation of game elements in non-gaming contexts (Deterding, 2011) with the objective of enhancing a service with game-related features with a focus in education (Huotari and Hamari, 2017). Gamification seeks to unite functionality and engagement (Morschheuser et al., 2017), to increase usability (Sasha et al., 2012), productivity, and satisfaction (Rajanen and Rajanen, 2017), to create more enjoyable experiences (Liu and Santhanam, 2017), and to drive behaviours (Rodriguez et al., 2014). Recently, there has been a growing trend toward the application of gamification in multidisciplinary areas such as commerce (Bittner and Schipper, 2014), environment and ecological behaviour (Prestopnik and Tang, 2015), cartography (Kapenekakis and Chorianopoulos, 2017), machine learning (Dalmazzo and Ramirez, 2017), software development (Chow and Huang, 2017), innovation (Roth et al., 2015), health and medical issues (Fleming et al., 2017), and education (Kim et al., 2018), among others. With respect to education, gamification seeks to increase learners' motivation and engagement with the purpose of increasing their performance. Although gamification seeks to provide a healthy and entertaining environment in which anxiety and frustration are reduced, according to Barata et al (2013), McDaniel, Lingren and Friskics (2012),

Hanus and Fox (2015), and Araya, Bottan, Cristia, and Ortiz (2019), there may be potential reductions in intrinsic motivation, increases in anxiety, and short-lived effects on engagement.

1.3. STATEMENT OF THE PROBLEM

As explained above, regarding EFL setting, Chile has few hours of the subject a week, few natural instances for real practice, and most of the input is provided by the teacher in the classroom. Furthermore, with respect to vocabulary teaching, many activities and strategies are suggested in early stages of primary school that comprise Total Physical Response, games, and chants. These type of approaches have a strong foundation on vocabulary learning and productive skills (i.e. speaking and writing) and are effective for EFL contexts as students are constantly being motivated through dynamic activities.

On the contrary, as students go to upper academic levels, the curriculum switches its approaches and vocabulary is left apart as it is eventually replaced for grammar, reading, and writing. Additionally, although the national curriculum suggests a battery of words to be taught in each unit, teachers are not able to cover all the objectives that are planned and displayed in the government's guideline, which, alongside the above mentioned problems of implementation, makes vocabulary learning one of the least practiced features.

Although the ministry's guidelines provide suggestions and strategies to teach vocabulary in upper levels, they often rely only on the use of the official textbook and worksheets, which may have an ineffective impact on sparking students' motivation and engagement. Additionally, teachers in Chile have little time to prepare effective and innovative material for their lessons due to the high amount of bureaucratic work and weak relation regarding class and non-class hours, which compromise the task of preparing and complementing the contents with activities

aimed to engage and motivate students. Based on the Chilean context in which vocabulary is not addressed as an isolated teacheable knowledge, this research aims to present a tool that satisfies all the necessary features for an effective lesson of vocabulary.

1.4. PURPOSE OF THE STUDY

The study aims to assess the effectiveness of a teacher-created tool to teach vocabulary based on the principles of gamification. The decision to research he academic approaches of gamification was taken due to the novelty of its design, the necessity of proposing creative solutions to daily obstacles encountered by EFL teachers in Chile related to motivation and engagement, the desire to explore new and innovative teaching methods and how they can be connected to curricular guidelines. Moreover, taking into account that this strategy has been used for over ten years, there are still few impact studies addressing its implementation and effectiveness, which is the reason to contribute to its study through a quasi-experimental method.

The execution of this project was carried out by observing and analyzing as many dimensions of its design as possible in order to understand the whole process. The development of the project was conceived by considering the impact on the lexical units learned, the type of words that were contained in the game, and the emotions and perceptions of the participants towards the initiative. To guide the project, a quantitative and a qualitative question arose, namely, (1) what is the impact of a gamification approach to vocabulary teaching on the learning and retention of target words? And (2) what is the perception of students towards this method and the impact it has on the way they learn vocabulary?

1.5. SIGNIFICANCE OF THE STUDY

The elaboration of a tool to teach vocabulary responds to the necessity of increasing and sustaining motivation and engagement in educational EFL contexts, specifically public and subsidized schools that teach English by following the guidelines of the national curriculum. The research aims to test the effectiveness of the gamification approach to learning which has been used in other contexts such as business, medicine, education, or business management, and has only recently been applied to the educational field. Thus, the present study seeks to validate and foster the implementation of gamified practices and activities to explore different approaches to teaching.

Teaching vocabulary through a gamified strategy aims to contribute an innovative and, hopefully, more successful manner of teaching vocabulary that can cover the dimensions of what can be considered a successful and complete understanding of units of vocabulary, namely, form, meaning, and use (Nation, 2001). The application of this research went through a process of implementation and analysis that made possible the planification of a strategy that allowed the researcher to assess the vocabulary learning of participants. It was done by applying a test that was based on identification of words (i.e. Passive Recognition Test) and the productive ability of writing them (i.e. Active Recognition Test).

As for EFL teachers, the process of implementing gamification in this manner would help them to foster the creativity to design new material to increase the effectiveness of the teaching process that encompasses motivation, engagement, situational interest, intentional vocabulary learning, and vocabulary retention. Furthermore, the study intends to validate the implementation of educative games in EFL settings through a comparison between a didactic treatment and

normal lessons of English in different contexts. Girardelli (2016), Choi (2016), Turan and Çimen (2018), and Asiri (2019), for example, have researched about the effectiveness of gamification in teaching EFL contents, its perception from the educational communities, and how different approaches of gamified strategies can be used to develop the multidimensional nature of English learning. Their findings concluded that games had a positive and significant impact on the results of students of different ages and contexts. The above mentioned authors also conducted qualitative approaches with regard to perception. They concluded that students preferred learning and practicing English by using games or systems of games; they also considered they learned more and better in this manner than in front of usual lessons. Moreover, this project is important because it explores and researches an effective teaching method concerning vocabulary in Chile, where there is a lack of this type of studies in upper educational levels as most of the researches that deal with games are related to kindergarten and primary levels. Finally, the current research intends to research the gamification methodology in terms of vocabulary teaching from a mixed method perspective, in which the quantitative approach addresses vocabulary learning and the qualitative motivation and perception.

1.6. ORGANIZATION OF CHAPTERS

Firstly, a general description of the research and its most important concepts, background of the study, conceptual framework, purpose, and significance was explained in chapter one. Afterwards, a specific revision of concepts and the nature of the proposed methodology will be explained in chapter two, which will be divided into pertinent theoretical concepts and approaches that are considered medullar to the research. Then, a detailed breakdown of the steps followed and instruments applied will be presented in chapter three. Later, the results, the discussion that arose from them and the corresponding analysis of them will be exposed in

chapter four. Chapter five will expose the inferential and descriptive statistics. Chapter six will expose the results and discussion of the qualitative aspect of the research. Finally, conclusions, findings, implications, limitations, and future recommendations will be explained in chapter seven.

2. LITERATURE REVIEW

2.1. OVERVIEW

The chapter will comprise meanings and perspectives of vocabulary from varied authors, the concepts of depth and breadth of vocabulary, the nature of vocabulary retention and vocabulary learning strategies, the importance of games in teaching English as a Foreign Language, the role of games in teaching vocabulary, the genesis and descriptions of gamification, and the concepts of motivation and interest and their relation to the learning process.

2.2. VOCABULARY

A number of authors have provided definitions for the concept of "vocabulary"; Newuman & Dwyer (2009) described it as "words we must know to communicate effectively; words in speaking (expressive vocabulary) and words in listening (receptive vocabulary" (p. 385). Additionally, Hornby (1995) refers to vocabulary as "the total number of words in a language; vocabulary is a list of words with their meanings" (p. 1331). Richards (2002) suggests that vocabulary "is the core component of language proficiency and provides much of the basis for how well learners speak, listen, read, and write" (p. 255). Lessard-Couston (2011) defines it as "the words of a language, including single items and phrases or chunks of several words which convey a particular meaning, the way individual words do" (p. 2). Then, vocabulary can be understood as the elements that build up a language (including words, chunks, and formulaic sentences) and that allow people to communicate ideas and express opinions.

Concerning the study of vocabulary and its function in language learning, Taffy refers to two perspectives (2002), receptive and productive vocabulary. Receptive vocabulary encompasses the words that a person is able to identify when he/she hears or reads them but feels uncomfortable if he/she has to use them in speech or writing. On the contrary, productive vocabulary addresses all the words a person feels comfortable when using them in spoken or written communication. In other words, receptive skills (i.e. reading and listening) can be associated with receptive vocabulary, whilst productive skills (i.e. speaking and writing) can be associated with expressive vocabulary.

According to the definition provided by Lesard-Couston (2011), the vocabulary of a language is equal to the words that compose it and allows people to communicate and understand in that very language. Folse (2004) proposes five sorts of vocabulary items that categorize the words of a language "(1) single words, (2) set phrases (e.g., *all of a sudden, as explained above*), (3) variable phrases (e.g., *it has come to our/my attention, as stated by/according to*), (4) phrasal verbs (e.g., *take off, turn into*), and (5) idioms (e.g., *like father, like son*)." (pp. 2-18). Therefore, vocabulary not only can be understood as isolated words or group of words put together to convey a meaning and an intention, but as complete ideas that comprise a full message.

Finally, generally speaking, learners seem to feel more secure by learning new vocabulary (in any manner) than they feel about learning grammar rules or memorizing complex structures. In concordance, other researchers, Laufer and Nation (1999), Maximo (2000), Read (2000), Gu (2003), Marion (2008) and Nation (2011) agree that vocabulary plays an important role in understanding written texts. Nation (2001) argues that vocabulary is an important part of the four skills of English (i.e. listening, reading, writing, and speaking). Furthermore, Rivers and

Nunan (1991) state that vocabulary is essential to express any second language as no successful communication would occur without words.

In concordance to Wilkins (1972), “while without grammar very little can be conveyed, without vocabulary nothing can be conveyed (pp. 111-112). Additionally , Lewis (1993) argue that “lexis is the core or heart of language” (p. 89), whilst Huckin (1995) sustains that second language readers rely heavily on vocabulary knowledge and the lack of that knowledge is the main and the largest obstacle for L2 readers to overcome.

2.3. DEPTH AND BREADTH OF VOCABULARY

One of the main reasons to focus on vocabulary acquisition is connected to the reading skill, as high-reading skills depends on successful lexical representations and therefore vocabulary should be a powerful predictor of reading (Kirby and Li, 2014). Furthermore, it has been empirically found that there is a strong relationship between vocabulary learning and reading skills (Stahl and Fairbanks, 1986; Qian, 1999, 2002; Nation, 2001; Beck, 2002).

However, although there has been consensus on the potential and significance of vocabulary learning, it is important to explore and understand it from its multidimensional perspective. Two wide dimensions of vocabulary can be identified, namely breadth and depth. Some authors have provided different descriptions to these concepts; according to Anderson and Freebody (1981), breadth of vocabulary can be defined as “the number of words for which the person knows at least some of the significant aspects of meaning” (p. 93). However, Hadley and Dickinson (2018) regard breadth not as a dimension of understanding but as an approach to teach and assess the number of words a student comprehends.

On the one hand. a breadth teaching approach would focus on teaching as many words as possible rather than teaching extensive meaning and use of words. On the other hand, depth can be understood as "the quality of depth or understanding" (Anderson and Freebody, 1981, p. 93). Accordingly, Proctor, Silverman, Harring, and Montecillo (2012) refer to it as how much is known about a lexical unit in regard to its semantic, syntactics, and morphological aspects.

On the other, regarding depth, there have been some approaches to measure and consider it. Meara (1996), Qian (1999), Haastrup and Henriksen (2000), and Read (2004) view depth as the ability to relate the knowledge of a word to other ones in the lexicon of a context. Furthermore, this perspective attempts to define depth as "the degree to which lexical networks have been established" (Kirby and Li, 2014, p. 3) and the relation that can be found between its own meaning and how it collocates to other ones. In other words, EFL learners do not identify a word by the mere understanding of its meaning but by how it relates to other ones in a given context.

Although there is a consensus amongst the scientific community on what breadth and depth are, the extent to which a lexical unit is considered to be known is an issue that needs its own explanation. Nation (2001) proposed three levels of knowledge for words, namely, form, meaning, and use. In other words, knowing a word would include being able to produce a unit in its written and oral form, understanding its general meaning, and basic uses.

2.4. VOCABULARY RETENTION

In order to understand the process of vocabulary learning, it is necessary to comprehend the nature and effectiveness of vocabulary learning strategies. AlQahtami (2015), Ismail et al (2017), and Sa'd & Rajabi (2018) made a calling to researchers to put more attention on the

development of the topic of vocabulary learning strategies as well as vocabulary learning process due to its neglect over the past years for three reasons. Allen (2009) identified the first reason as a general long-lasting belief amongst teachers and researchers that students do not need the assistance of educators to acquire new vocabulary. The second reason was suggested by Carter and McCarthy (2014) who pointed out that vocabulary teaching and learning were perceived by the research community as a web that consisted of variables involving the transference of the meaning of words from one language to another and the cultural meaning attached to it. In order to expand the previous idea, Carter & McCarthy (2014) referred to the scarcity of research on effective language teaching strategies to promote vocabulary teaching. The final reason proposed by Brown and Lee (2015) claimed that as a result the teaching of vocabulary was replaced by the teaching of grammar because it was perceived as a less dangerous, more comfortable, and easier way to approach language learning with L2 learners.

The field of investigation regarding language learning strategy started gaining more attention in the specialized community due to its evident importance in the language learning process (Alizadeh, 2016; Asyiah, 2017; Song and Chen, 2017). Additionally, Nation (2013) recognized the importance of the development of this field as the lack of sufficient vocabulary leads to learners being unable to speak and express ideas.

In the early stages of vocabulary learning strategies research, Gu and Johnson (1996) divided these strategies in four different categories: vocabulary activation strategies, vocabulary cognitive strategies, vocabulary memory strategies, and vocabulary meta-cognitive strategies. Moreover, regarding memory strategies, Gu and Johnson (1996) also divided them into two groups: (1) the encoding group strategies which includes word structure, word association, contextual encoding, auditory encoding, visual encoding, imagery and semantic mapping and (2)

the rehearsal group strategies which includes rote memorization and word lists. Additionally, Schmitt (2011) provided his own definition to those two groups, while the first comprise visuals to create connections between the target words and the ones students already know that facilitate the transference from the working memory to the long-term memory, the second is, basically, learning target words by the principle of repetition and practice.

Although literature is scarce regarding the effectiveness of language learning strategies, some researchers have reported the impact of some strategies in the retrieval of words amongst learners. Radwan & Rikala-Boyer (2011) and Nilforoushan (2012) address the positive influence of semantic mapping in students' knowledge. Likewise, Pudewa (2005) and Oanh and Hien (2006) argue positively towards the influence of rote memorization (a technique based on repetition) in students' knowledge and memorization of L2 vocabulary. Nonetheless, due to the scarcity of research regarding language learning strategies, little consensus has been achieved in the community. For instance, Gass & Selinker (2013) argue that rote memorization may have a negative influence on students' creativity on the one hand, and on their understanding and memorization of target words on the other hand.

The impact of vocabulary learning strategies is related to the use of three types of memory that interact with the activity and store the target words in a short-term or long-term level. Anderson (2015) and Randall (2007) describe them as sensory, short-term, and long-term. Sensory memory has little capacity and treats mostly information that is received from visual and auditory channels. Although it interacts with massive amounts of information, it only retains what the user considers important in that particular moment and which will be retained in the next level.

Short-term memory is longer and larger in relation to time and capacity and is the receptor of the information that is dealt at the sensory level. One of the important features of this level has to do with the processing of the information, and there are some factors that influence its effectiveness. The intellectual and cognitive abilities control the amount of information to be processed, much repetition of several units of knowledge reduces the amount of information to be processed, and the selective process of filtering information in terms of relevance and necessity is related to the instinctive attention of each individual.

Long-term memory has unlimited capacity and stores information for a long period of time. It deals with three types of information: imagery information (mental images, procedural information (information about the manner in which things are done), and declarative information (episodic and semantic information). The information at this level is affected by the type of organization which, to be considered as effective, needs to be stored by interacting with the two previous levels.

Concerning vocabulary retention and memory processing, some authors have assessed the effectiveness of this process and the recall of target words stored in the long-term memory level. Abbasi, Hashaskhah, and Tahiri (2018), Ghorbani and Riabi (2011), Nemati (2013), Sagarra and Alba (2006), and Abu-Ayyash and Badr (2019) empirically proved the effectiveness of varied language learning strategies. These studies showed the significant relevance of memory strategies on students' retention abilities; the main issue of the above mentioned studies is that they were successful in activating the human mind to operate at a significantly high level of word processing.

2.5. INCIDENTAL AND INTENTIONAL VOCABULARY LEARNING

Incidental vocabulary learning is understood as the vocabulary learned as a by-product of an activity that is not purposefully designed for that objective (Gass, 1999; Hulstijn, 2001; Loewen, 2015). In EFL settings where there are not large quantities of input, the teaching of L2 may be responsible for most of the incidental vocabulary learning (Laufer, 2003). Conversely, intentional vocabulary refers to "any activity aiming at committing lexical information to memory" (Hulstijn, 2001, p. 267), and, according to Laufer (2009), it can result in better outcomes in vocabulary learning. Nevertheless, although the effectiveness of both strategies are hard to identify in practice (Hulstijn, 2001), they can be improved in order to draw learners' attention towards important information about a word (Laufer and Girsai, 2008).

Some authors have discussed the vocabulary size necessary to comprehend and produce different English discourses. Nation (2006) suggested that learners need to understand the most frequent 6,000 to 7,000 word families to understand spoken discourse and the most frequent 8,000 to 9,000 to understand written discourse. On the other hand, Van Zeeland and Schmitt (2013) and Webb and Rodgers (2009) sustain that the most frequent 3,000 word families are necessary to understand spoken discourse. Nevertheless, a research conducted by Webb and Chang (2012) suggests that in most EFL contexts learners are unable to learn the most frequent 3,000 without learning the 8,000 to 9,000 family words. Furthermore, learning vocabulary incidentally may provide the most successful manner to develop vocabulary learning in settings where the amount of input is reduced to classroom English (Webb and Nation, 2017), which is why there is an importance in providing strategies to nurture vocabulary growth.

The effectiveness of different methodologies to teach vocabulary learning through an incidental learning approach vocabulary learning approach has been studied by some researchers. For example, Coyle and García (2014), Milton (2008), Tegge (2017), and Pavia, Webb, and Faez (2019) combined different strategies to pre teach vocabulary that concerned visual aids and focused on incidental vocabulary learning through songs; Qian (2019) conducted a study to foster vocabulary growth by an online reading modality, whilst Karami and Bowless (2019) compared the effects of incidental, intentional, and incidental-intentional vocabulary learning approaches on vocabulary learning and concluded that a mixture of both strategies obtained the most successful results. Furthermore, what these researches have in common is the fact that they control for the times the participants encountered words, which mirrors work by Horst, Cobb, and Meara (1998), Webb and Chang (2015), and Peters, Heynen, and Puimége (2016), who have demonstrated through their researches based on reading comprehension that multiple encounters with targeted lexicon can foster vocabulary acquisition. Finally, Hung (2015) adds that "intentional learning of vocabulary speeds up the learners' process of lexical development due to focused repetition or memorization strategies, which can be completed individually in a short period of time" (p.107).

2.6. IMPORTANCE OF GAMES IN TEACHING ENGLISH AS A FOREIGN LANGUAGE (EFL)

One of the vices that teachers develop over the years regarding teaching practices and classroom environment is related to the dynamism of their lessons as they are likely to become repetitive and monotonous if they only rely on books or bibliographic materials to teach. Some

authors suggest that games should be understood as a central part in language learning; Silvers (1992), claimed that games are used by teachers to stop monotonous moments in their classes and to fill in time. Additionally, games can be used to put contents into practice; in other words, games can be conceived as an active, dynamic, and didactic manner of applying theory in a controlled environment that concerns interaction triggered by the mechanics of the game itself. Likewise, Greenall (1990), points out that games promote a positive and healthy competition amongst learners.

Last Man Standing, Charades, Hangman, Taboo Words, and *Hot Seat* are examples of games that have been used by teachers of English to teach contents and permeate the environment of a classroom with motivation and dynamism of contents. Games in the EFL classroom are understood as a resource that focuses, mainly, in the practice of contents rather than explanation or assessment. The idea of using games to teach English has evolved and taken part in the digital era, in which titles such as *Trace Effects*, *CyberSense* and *Nonesense*, *Ad Decoder: Decipher the Media*, and *Allies and Aliens: A Mission in Critical Thinking* have served the purpose of helping players to practice English through an exploratory and practical perspective of the content, which means that gamers are able to discover new vocabulary and structures as they play and use it as the development of the game requires them to advance. Additionally, role playing games such as *Final Fantasy, Pokemon*, and *World of Warcraft* were not originally created as educational games, but have been used to develop reading and writing skills based on their narrative and linear nature (Palmer, 2010).

Teacher of English that teach kindergarten students will often utilize games, songs, and chants as the most common tool to cover and practice contents. As children grow up and mature, they are exposed to fewer ludic moments from their teachers as lessons focus on the

development of the four basic skills of language learning mainly through books due to the structure and organization of curricula. Additionally, adult teachers perceive that students have the necessity of being exposed to ‘more serious’ activities as they grow up, and, likely, the lack of time for professional duties that teachers face may affect creative abilities regarding the understanding of the theory of didactics.

2.7. GAMES AND VOCABULARY TEACHING

In the past two decades, there has been a renewed interest towards learning and teaching vocabulary mainly due to its importance to comprehension-based approaches to language development, like digital games (Maftoon, Hamidi & Sarem, 2012). In line with this increased interest, Griffiths (2003, 2006) explains that the digital era has provided a new perspective to research language acquisition. One manner to contribute to language teaching and learning has been the development of games that mixes real life situations with education, although most of the games and researches are related to general education more than EFL. Two examples of vocabulary acquisition games are the well-known application for smartphones Duolingo, launched in 2012, and the game developed by the US Embassy Trace Effects, launched in 2010. Additionally, other non-educational games have been used with educational purposes such as The Sims (Ranalli, 2008), Forge of Empires (Jakubowski, 2017), Final Fantasy (Widitiarsa, 2018), and Age of Empires (Yu, Fan, and Wang, 2014) to teach economics, social studies, and war strategy. As the focus is not educational, it becomes a challenge to adapt the material to be aligned with the desired knowledge and the content in the game.

2.8. GAMIFICATION

Santayana described the concept of play as “whatever is done spontaneously and for its own sake” (1955, p. 19), whilst Salen and Zimmerman (2004) referred to game as “a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome” (p. 80). Additionally, Vygotsky described a game as a “purposeful activity” (1067, p. 16), and “a source of development” which was mentioned in the development of the Zone of Proximal Development. As can be seen, “play” and “game” are understood as alike concepts that involve willingness and emotionality to be considered as such. Salen and Zimmerman (2004), regarded these two concepts as complimentary to each other as “games are a subset of play” (p. 72) while play can be considered as an external element of games.

Deterding (2012) describes the term *gamification* as “the use of game design elements in non-game contexts” (p. 10). This approach has had an increasing fame in fields such as business, health, and education and comprises the process of turning experiences into games for varied purposes by following steps for game-design that includes, among others, competitive aspects, real life references, immediate feedback, and interaction with other gamers; in other words, the game, its context, and its connection to the reality and the gamer are regarded as elements that should be analyzed together as they synergize to provide an effective gaming experience. Moreover, according to Figueroa (2016), “any task, assignment, process or theoretical concept can be gamified” (p. 38), which implies that any desired concept might be conceived from the perspective of games, which concerns, as explained above, learning through interaction and evolution of the participants through a reward system. Finally, regarding the field of education,

Kapp (2004) states that games comprise a tool for promoting learning and that they are based on educational psychology.

As games and digital interactions are typically related to younger generations, Prensky (2001) described the current generation of the time as digital natives who have been immersed in the use of technology since birth; an age group that uses technology for leisure and entertaining purposes, acquires and learns about culture with internet, and educates themselves through different channels that provide content in form of text, videos, or games; in other words, the lenses of technology allows them to perceive reality in a holistic manner as they are in constant contact to the elements that compose their immediate contexts. Additionally, according to Figueroa (2015), the learners from this generation "process the information differently and the educational system does not fit their needs" (p. 33). Indeed, the generation that was born in early 2000's grew up with access to information and knowledge through the internet that was unprecedented to previous generations. This has challenged educators to update themselves and their practices in the classroom in order to increase engagement by creating activities that provide a space for excitement and engagement.

Although gamification includes the concept of game in it, it does not equate to the activity of gaming. A game is "structured play" (Matsumoto, 2016, p. 1482) which is usually performed for fun. The gamification approach is "a strategy for influencing and motivating the behaviour of people" (ibid) that applies game elements such as techniques, designs, dynamics, and thinking style in non-game contexts. Regarding its application in education, the methodology intends to increase engagement and motivation through game thinking and game design.

Gamification is a recently coined term that has been applied in fields such as business, marketing, corporate management, and ecology (Dicheva *et al*, 2015*)*. In order to achieve a successful implementation of gamification, companies utilize strategies to engage customers to participate actively in their campaigns, by assigning reputation points for answering questions – as Stackoverflow.com does –, delivering an in – game valid currency for completing courses and stages – as is the case of Duolingo –, or giving more cybernetic freedom to users of the e-commerce corporation site eBay as they are able to sell products to larger audiences if they maintain a responsible behavior with their customers and get enough recommendations of the service they provide.

2.9. GAMIFICATION AND ITS EFFECTS IN MOTIVATION

Using games to educate responds to the necessity of teachers to implement dynamic, innovative, challenging, and entertaining activities to enhance motivation of learners and ensure engagement. To achieve this purpose, two major categories of games can be analyzed for the purpose of this research: serious games that are used for educational purposes and educational games that consists of games that are developed with the specific purpose of supporting teaching. Thus, in serious games, educators explore aspects of a game that can be adapted to the context of a classroom, whilst educational games address strategies, topics, and content that are carefully implemented in order to enhance motivation and, consequently, learning.

The development of educational games has been covered with proposals for different platforms of interaction, i.e. activities inside the classroom that are mainly based on Total Physical Response, a strategy that consists of teaching vocabulary concepts or language by using physical movement to react to verbal input as the process mimics the way in which infants learn,

computer video games that are used to teach about different contents and subjects, video games in mobile devices, board games, and card games. One aspect that researchers are interested in is the effects of games (of different platforms) on motivation in contrast to traditional lessons and how effective this is regarding educational purposes. For example, Ciampa (2014) proposed a mobile-learning model to help to understand the motivating features of games in this platform; he proposed that motivation could be enhanced through challenge, curiosity, control, recognition, competition, and cooperation. Additionally, Joosten (2010) argued that the use of mobile devices comprises a more active learning experience which, consequently, improves students' engagement, learning and content retention, and the use of new technologies improves students motivation, which encourages students to solve problems and satisfy their curiosity.

As mentioned above, gamification constitutes the implementation of gaming elements in non-gaming contexts. According to Domínguez *et al* (2013), the process has been used to increase students' motivation and engagement. The fact that a game itself engages players is due to the elements that serve as external motivators. De-Marco, Domínguez, Saenz-de-Navarrete, & Pagés (2014) refer to these motivators as clear objectives, short-term achievable goals, seamless sense of progression, and frequent rewards.

Educational gamification is intended to include aspects of games in order to shape behaviour of players/learners to solve one of the main challenges in education referred to motivation of students. A gamified classroom that includes curiosity, interaction, competition, and cooperation as its main elements might help to sustain engagement and increase participation in activities. Addressing this issue, Dicheva *et al* (2015) propose a system of tangible or intangible rewards through a level-up logic for frequent participation in activities, summative course grades, or earning virtual goods.

Two aspects that are necessary for an educational activity to occur are resilience in front of failure and effective feedback. Dicheva *et al* (2015) claim that failure can be reframed as an essential part of gamified educational activities, to which a better and more resilient response is expected in front of it. Considering feedback, gamification can reduce the time frame for this pedagogical process to occur as it ensures immediate feedback after a cycle of gaming, which contributes to maintaining engagement, giving learners the chance of self-assessment of knowledge and capabilities, and developing an environment in which effort and consistency – rather than mastery – are rewarded. Accordingly, Alsawaier (2017) states that "in gamified environments, students are encouraged to engage in the process and reasoning and are evaluated accordingly regardless of whether they succeeded in their endeavour or not" (p. 6).

2.10. INTEREST

One of the challenges for countries regarding educational policies is related to how they conceive classroom environment and academic achievement. Taking the example of United States, its educational system tends to focus more on elevating students' performance than sustaining interest as bserved through their strong public policies based on assessment (Harackiewicz, Prinsky, and Smith, 2016); yet, according to Hidi and Harackiewicz (2000) when students are interested in an academic topic, they are more likely to go to class, pay attention, process information effectively, and perform well as the final outcome. Concerning sustained interest in high school, Harackiewicz et al (2016) claims that "students who discover academic interest in high school and college are better prepared for satisfying careers" (p. 1). Likewise, Renninger and Hidi (2016) declare that "interest is a powerful motivational process that energizes learning and guides academic and career trajectories" (p. 1). In relation to interest

and gamification, one important aspect of the methodology is the sustained interest learners develop as they are engaged with a game.

Regarding the factors that trigger interest, this can be understood from two co-occurring perspectives, situational and individual. Situational interest relates to an individual short-term experience that is caused by the captivation provoked by an object, idea, or topic; Individual interest concerns the curiosity and feelings that the same object, idea, or topic causes which leads to a more lasting and enjoyable experience (Harackiewicz et al, 2016). In other words, *interest*, from a psychological perspective, is understood as a *state* of mind in which attention, effort, and affect experience are increased (*situational interest)*. Likewise, an increase in the predisposition to participate and explore a particular object or topic is understood as *individual interest*.

The two approaches to interest comprise different and important elements that help to understand its nature, the reasons for it to occur, and, from the perspective of educators, control it. *Situational interest* implies the presence of focused attention, perceived value, and feelings of enjoyment which are aspects triggered by emotions that a specific situation contains (Hidi & Renninger, 2006). On the other hand, situational interest leads to a more effective functioning of cognitive processes that enforces attention and learning.

To sum up, the different dimensions of vocabulary permit to understand its nature and how it is acquired and taught by learners. Breadth of vocabulary is related to the number of words a person knows, whilst depth is how well a person knows a word by being able to connect it to other elements. Educative games concerning vocabulary teach words through the incidental vocabulary learning scenario, in which vocabulary is acquired while the attention of learners is

putI on something else. It is important to foster a situational and individual interest so students perform better.

3. METHODOLOGY

3.1. INTRODUCTION

The research comprised the implementation of an educational teacher-created card game that aimed to contribute to vocabulary learning among a group of primero medio students (14-15 years old) at a sunsidized school in Santiago, Chile.

The purpose of applying a teacher-created card game as a treatment to assess the improvement in vocabulary acquisition was made based on the necessity of teaching specific contents in a dynamic and entertaining manner. Vocabulary learning in EFL Chilean classrooms is usually an aspect that is part of a reading lesson rather than a piece of knowledge that is taught in isolation. In other words, vocabulary is conceived as pivotal content in English lessons that has scarce strategies and activities to be implemented and its teaching is covered through a part of the development of other skills.

The research was carried out by following a mixed-method analysis, in which the quantitative data were collected by applying a quasi-experimental design with a control and experimental group. As for qualitative data, a semi-structured interview was applied and analyzed in order to understand the perceptions of the participants towards the game.

3.2. RESEARCH DESIGN

The research used a mixed method design that attempted to explore the impact of a pedagogical treatment (a card game) in the vocabulary knowledge of a group of students of 9th grade (14-15 years old). For this purpose, two different classes of the same level were selected in order to include a control and an experimental group with the objective of comparing their performance after regular vocabulary lessons (control group) and a gamified approach to

learning vocabulary (experimental group). The vocabulary learning was assessed by means of target words that were selected by applying a test with words and filtering the ones that were unknown to all the students.

Concerning data analysis, the quantitative aspect of the research intends to analyze the results regarding the lexical units learnt by the participants after the gamified approach to learn vocabulary, whilst the qualitative aspect will explore the perceptions and feelings of the participants in the experimental group towards the initiative.

3.3. CONTEXT AND PARTICIPANTS

The experiment was carried out in a Chilean public, single gender (girls) school located in the city of Santiago, most of which belong to low and middle class income. The majority of the participants have not taken English in other specialized institutions, therefore their level is quite similar. They study at a school of mixed administration that does not work with the material provided by the government, as the institution hired the services of a publishing house that provides them with specialized course books, training on the use of the texts, and extra material to foster English teaching. A baseline proficiency test was applied by means of having a better general understanding of their current level. The school, has three hours of EFL a week that are split in one pedagogical hour per block, i.e. a lesson lasts 45 minutes.

The treatment was applied in two intact groups of 9th graders (a control and experimental group). The criteria for selecting the particpiants were based on their maturity and their minimum knowledge of English regarding the contents covered in the national curriculum, which made them successful research individuals as their proficiency levels were controlled by using a baseline proficiency test.

3.4. INSTRUMENTS AND MATERIALS

3.4.1. Card Game.

The way in which the gamification methodology was implemented was through a card game. The game consisted of twenty two cards of vocabulary with a word in English in one side and an image and its meaning in Spanish on the other. The players had to challenge each other so they could guess the meaning of the words in English in a system of repetitive rounds. The words included in the game were selected by applying an edited version of Vocabulary Knowledge Scale (Paribakht and Wesche, 1995) to ensure that all the words were unknown to all the participants.

3.4.2. Oxford Quick Placement Test.

In order to control for the proficiency levels of the students and ensure that their previous knowledge would not affect the results of the pedagogical treatment, and measure substantial changes in the vocabulary knowledge of students, an adapted version of Quick Oxford Placement Test (OQPT) was implemented. The students were applied the first 40 questions of the instrument instead of the 60 original questions to avoid tediousness towards the test.

3.4.3. Vocabulary Knowledge Scale (VKS).

VKS is an instrument designed by Paribakht and Wesche (1996) that is used to measure the level in which vocabulary learners know a word. The scale contains five progressive levels of identification that go from " I haven't see this word" to " I know what this word means and I can use it in a sentence". Since its elaboration, it has been used in several researches related to

vocabulary acquisition, vocabulary knowledge scales research, and critical analysis of its use (Bruton, 2009; Batty, Bovee, and Stewart, 2012; Zou et al., 2017).

3.4.4. Passive Recognition Test and Passive Recall Test.

As post-tests, passive recall and passive recognition vocabulary tests were created based on the guidelines provided by Laufer and Goldstein (2004) on how to test vocabulary knowledge.

3.5. PROCEDURES

The first part of the research was to identify 16 target words that would fit the purpose of the study. They were selected from a vocabulary specialized site called Lextutor (www.lextutor.ca) from which words from various frequency ranges could be found. As the proposal regarded a gamification intervention in the format of a card game, it was thereby decided that the best kind of words that would fit the necessities of the study were content concrete words that could be depicted through images. It was decided that the words would be selected from the range of the 2,000 and 3,000 most common words in English according to Lextutor. Regarding the type of word chosen for the research, it was decided that nouns would compose the words in the game in concordance to Gentner (1982), who proposed the existence of a perceptual distinction between concrete concepts such as things (nouns) and predicative concepts of activity (verbs) or causal relation (connectors). Moreover, he claimed that nouns are conceptually simpler, thus, simpler to remember, for which they were selected to comprise the game instead of more abstract concepts like verbs. In line to that description of nouns, Koleva (2018), states that nouns and verbs are acquired differently as nouns are simpler linguistic items than verbs, even in a mother tongue. Additionally, there are several studies that have been

focused on the acquisition of verbs and nouns by children in their mother tongue (Colombo, Navarrete & Arfe, 2017; Gentner, 1982; Kauschke, Lee & Pae, 2007; Lavin, Hall & Waxman, 2006) which have concluded children dominate more nouns than verbs in early stages of language learning. For example, Colombo, Navarrete and Arfe (2017) concluded that it was easier for children to come up with names of objects rather than verbs. Concerning the statements of the above mentioned authors, it was resolved that a first trial of these type of card games would be with nouns as they compose simpler linguistic units and were thereby easier for the participants to learn.

In order to identify potential words to assess vocabulary learning and retention, an adapted version of Vocabulary Knowledge Scale (VKS) (Paribakht and Wesche, 1996) was applied to control and experimental groups to ensure that participants did not know the target words. Additionally, the adapted version comprised only the three first levels of VKS. In order to avoid students to remembering the target words, the target words were assessed by mixing them with twenty more words of the same range of common words and which were concrete nouns as well. After the VKS was applied and the results were displayed in a chart according to the times the words were selected in each category, 16 target words were selected to compose the card game.

When the VKS was applied and the target words were implemented to the game, it was piloted with a group of students from the same school but who were neither in the control nor the experimental group in order to assess the mechanics, dynamics, playability, and linguistic features of the cards. The game was made out of cards with words in English in one side and the translation accompanied with an image on the other. The images were carefully searched in order

that they be animated, appealing, and consistent with their corresponding vocabulary word. The objective of piloting the game was to try, analyze, and validate the mechanics, playability of the game and the functioning of the images and words so they were not too ambiguous or difficult to identify. The groups were randomly organized in groups of three without considering their OQPT performance because the final number of participants was considered not to be sufficient to be relevant to the research. The students played three rounds of the game and, at the end, the ones who got more points on the match were considered winners.

Immediately after the treatment was carried out, students took a passive and active recall recognition test which would later be used as posttests to analyze the data. Furthermore, the same tests were applied two weeks later with the purpose of analyzing their vocabulary retention.

3.6. METHOD OF ANALYSIS

The quantitative data were analyzed by running four t-tests that were applied in order to know the statistical significance of the performance of the participants with respect to lexical units learned after the gamification approach was applied to the experimental group in contrast to the vocabulary learning of the control group which went through a cotidian lesson of English. thus, the two means were compared with the assumption that experimental group would perform better after having received a gamified lesson of vocabulary. Furthermore, t-tests were run because the research was based on the results gathered in two different groups which are considered to yield two independent variables that do not affect each other’s performances.

Both quantitative and qualitative data were analyzed by using Statistical Package for the Social Sciences (SPSS), a software specialized in researches with a base on social sciences.

SUMMARY TABLE

Research Question 1	What is the impact of a gamification approach to vocabulary teaching on the learning and retention of target words? and
Research Question 2	What is the perception of students towards this method and the impact it has on the way they learn vocabulary?
Objective	• To assess the effectiveness of a teacher-created tool to teach vocabulary based on the principles of gamification. • To increase awareness of the vocabulary learning process of EFL students. • To know the perception of EFL students when learning English through games.
Instruments	Card Game, Oxford Quick Placement Test, Vocabulary Knowledge Scale, Passive Recognition Test, Passive Recall Test.
Method of Analysis - Quantitative Data	t-tests
Method of Analysis - Qualitative Data	Themes and codes

3.7. ETHICAL CONSIDERATIONS

Firstly, with the objective of informing the participants about the content and time implications of the research, an informed consent was delivered to them to ensure they were fully in knowledge of the activities and purposes of the research. This message was important because tutors needed to be in knowledge of the time the project was going to be applied because it was going to occur during class time.

The identities of the participants would remain anonymous in the final version of the project except during the analysis stage in which names and classes of the students were necessary to compare results. Furthermore, the individuals were explained that participation in

the study was entirely voluntary; fortunately, all of the students that participated were present at all the stages of the project.

The research was conducted by following a semiexperimental design and the data were collected and analyzed by following the guidelines of mixed-method approach. The results of the study were split and analyzed separately in their quantitative and qualitative aporaches respectively. The quantitative data corresponded to the answers of the participants in two post tests and the qualitative data to the answers to a semi structured interview.

4. QUANTITATIVE RESULTS AND DISCUSSION

4.1. OVERVIEW

The following chapters will expose the results of the post the pre and post tests of both experimental and control group. The results were displayed in a table (Table 1) that contains the means of each test applied divided per group alongside the corresponding standard deviation. In order to facilitate the visualization of the contrast of the groups, the means were displayed in a chart (Figure 1) that aids to appreciate the contrast between the two groups. It can be seen in Table 1 that the response of participants in both groups was similar and with a trend to high scores. Indeed, contrary to what was expected, the higher score was achieved by the control group in the delayed passive recognition test, whilst the lowest score was found in the immediate passive recall test of the control group as well.

4.2. DESCRIPTIVE STATISTICS

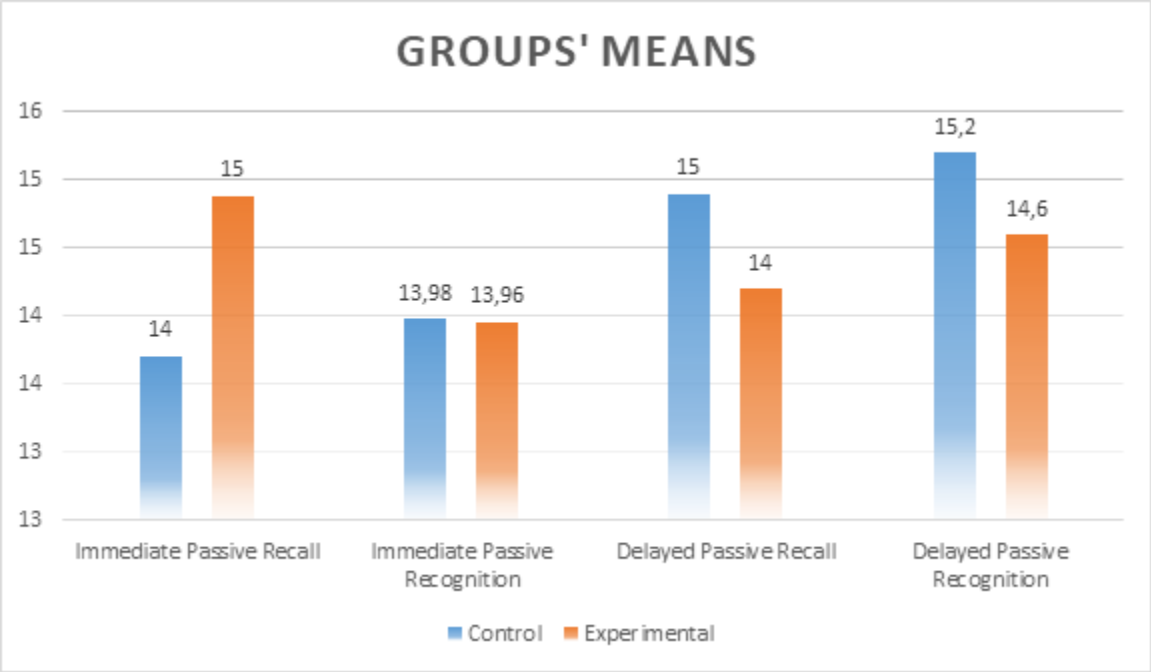
Table 1

Means of the immediate and delayed post-tests of the control and experimental group.

Variable	**Group**	**N**	**Mean**	**Std. Deviation (σ)**
Immediate Passive Recall	Control	24	13.708	2.8358
	Experimental	27	14.889	1.4233
Immediate Passive Recognition	Control	24	13.98	2.884
	Experimental	27	13.96	2.197
Delayed Passive Recall	Control	19	14.895	2.3308
	Experimental	20	14.200	2.0926
Delayed Passive Recognition	Control	20	15.20	1.281
	Experimental	20	14.60	2.010

Figure 1

Chart of the means of the result of immediate and delayed tests of the control and experimental group.



As can be seen in the graph, the results of the means of the data collected (Figure 1) is irregular as values are ambivalent concerning immediate and delayed tests. On the one hand, the control group increases its performance in the Delayed Passive Recall Test in relation to the Immediate Passive Recall Test, which is a result that is considered to be unusual as it was expected that students do not remember all the words after two weeks of having seen the words. Furthermore, a slight increase can be identified between the Immediate Passive Recognition test and the Delayed Passive Recognition Test, which means that students were able to remember more words two weeks after the usual lesson of vocabulary.

The standard deviation in the immediate and delayed passive recognition test of the control group (Table 2) remains similar ($\sigma = 2.8358$ and $\sigma = 2.3308$), which means that after the usual lesson of vocabulary and two weeks after the participants made similar mistakes and the amount of words they could remember, as a group, was almost the same. A slightly significant difference can be identified in the standard deviations values of the Immediate Passive Recognition Test (2.884) and the Delayed Passive Recognition Test (1.281), in which in the second case students made fewer mistakes, meaning that they were able to remember more words two weeks after the usual lesson than after the first day the data was collected.

On the other hand, the experimental group reduced its performance in one point of the mean with respect to the immediate and delayed versions of the passive recall test (Figure 1), which means that the experimental group remembered fewer words two weeks after the treatment. On the contrary, in the passive recognition test, the experimental group was able to remember slightly more words two weeks after the treatment was applied as the delayed test had a little increase in contrast to the immediate test.

4.3. INFERENTIAL STATISTICS

The data was analyzed by running four t-tests in order to know if the results were statistically significant ($p<.05$). The results did not accomplish the objective of the research as there was only one that was closer to be statistically significant and was found in the immediate passive recall test as $t = 0.56 < 0.05$. The current research expected to yield a significant improvement in the results of the experimental group in contrast to the vocabulary units learned by the control group, but the results concluded that there was no significant improvement in terms of the treatment applied.

Table 2

Results of t-tests

				95% Confidence Interval of the Difference	
	t	**Sig (2 tailed)**	**Mean Difference**	**Lower**	**Upper**
Immediate Passive Recall Test	1.911	.056	1.1806	-2.3814	.0303
Immediate Passive Recognition Test	.023	.982	.016	-1.382	1.414
Delayed Passive Recall Test	.697	.495	.5996	-1.2148	2.4139
Delayed Passive Recognition Test	1.172	.246	.643	-.454	1.739

Table 2.

5. DISCUSSION OF QUANTITATIVE RESULTS

The current research aimed to contribute to enrich the participants' breadth of vocabulary as it was based on the acquisition and learning of vocabulary units more than its practical use. The results exposed that participants actually learned almost the totality of the words included in the research as the means of both groups fluctuate between thirteen and fifteen recognized words in the immediate and delayed tests. Regarding depth of vocabulary, the game did not develop the understanding of words and its relation to other words or collocations (Kirby and Li, 2014), but it fostered its understanding in a multidimensional manner as the words were displayed with is meaning in Spanish and a proper image.

Through the delayed post tests to measure vocabulary retention of participants, the game accomplished to be effective to teach the target vocabulary and keep it in the long-term memory of the participants according to the results displayed in Table 1. Nonetheless, although the results of the experimental group were successful, so were the results of the control group. The values of the delayed post tests fluctuated between fourteen and fifteen points, which means both groups remembered almost all the words (out of a total of seventeen).

Using games to teach vocabulary is connected to language learning strategies that are adapted to foster the use of different abilities of learners. For the current research, memory and repetition strategies were implemented in a card game to teach vocabulary. Other researchers have explored and implemented language learning strategies in gamified approaches to teach vocabulary; Akdogan (2018) assessed the effectiveness of game activities such as spelling puzzle, parrot game, word association, and read aloud games to teach vocabulary, how many vocabulary units the learners could remember afterwards and which one they prefered. She

concluded that participants (primary school children from Turkey) improved their vocabulary acquisition in several of the activities when compared to normal lessons. Moreover, the students related they felt much more confident and relaxed in that environment than in other non gaming activities. Although the age of the participants and the measurable vocabulary acquisition aspect was inconclusive, the testimonies related to the perception of students towards an educative game versus a normal lesson was similar to the current research, in which the Chilean participants declared they prefered this type of initiative to learn new words.

Farrah and Shabaneh (2019) conducted a study that assessed the impact of games in the classroom on vocabulary retention amongst 20 third and fourth grade students at a school in Palestine. The researchers introduced unfamiliar vocabulary through games and assessed the effectiveness of the methodology through a pre and post tests system. The results were conclusive as the null hypothesis which claimed that the difference between the values would be superior to .05, therefore inconclusive, was rejected by the alternate hypothesis which claimed that the difference between the two groups would be inferior to .05. Furthermore, the researchers utilized a second method of assessment which comprised the observation of the behavior of the students whilst being exposed to games. The ones in charge of the study concluded that students sustained a positive and enthusiastic attitude towards games during the whole period of time of the methodology. Moreover, the results were statistically significant because there was a significant and prominent increase in results in the identification of vocabulary units. Although the methodology was different in terms of instruments to collect quantitative data (which might have been used in the current scenario to measure for vocabulary knowledge before and after the implementation of the game), the perceptions of the students were similar as they thought positively towards games over usual lessons of vocabulary.

Chen and Chan (2019) assessed the effectiveness of augmented reality flashcards versus traditional and simple paper flashcards, both concerning vocabulary of animals. The research was conducted in 98 children between 5 and 6 years of a school in Macau, China and split in two groups, one group utilized traditional flashcards and the other augmented reality flashcards. The augmented reality flashcards comprises the use of smartphones so the participants could scan the information in a QR code and a specialized application would translate it in a 3D representation of the animal with movements, which provides a more authentic and immersive experience with vocabulary learning. The investigation was based on three research questions that aimed to discover the perceptions of students on their vocabulary knowledge, the effectiveness of traditional versus augmented reality flashcards, and the perceptions of teachers towards the implementation of this kind of technology. The results concluded that both groups made significant progress in their vocabulary learning but students who used augmented reality flashcards achieved a slightly higher score. However, the comparison of both groups yielded that there were no significant differences in their learning gains, which could be understood as an equal effectiveness of both methods in practical terms. Although there was no measurement of the perceptions of the students in this study, the quantitative results were similar in terms of improvement because, although there was a slight statistically significant difference, both groups were considered to be similar in their performances as both improved. Similar to the current research, control and experimental group improved their performances in the tests.

Lodzikowski and Jekiel (2019) assessed the effectiveness of board games to teach prosody in advanced proficiency level students from a university in Poland. The researchers created three board games that comprised the teaching of word stress (*Stress Run*), weak forms

(*Stress Maze*), and phonotactics (*Phono Tactics*), all of which were freely available at a print-and-play format. The study was focused on 29 students who had to take a compulsory two semester course of advanced English at the institution. The results showed that only in the first board game (*Stress Run*) did the learners maintain a significantly higher engagement in contrast to usual lessons. Regarding the students' performance, they showed a significant 8% improvement in their post-class quiz in contrast to other participants who did not play the boardgames. The researchers concluded that the participants reported a slightly high in-class engagement for the three prosodic topics, a moderate increase in the post-class quiz, and a positive perception of the usefulness of board games to teach these specific topics. The set of board games actually yielded a significant difference in the results as the performance of the participants was increased in front of the ones who did not play the game. Likewise, the students perceived the game as useful and considered that they should be applied in other contexts.

Although the results were varied in all the cases analyzed, there was a trend towards the significant impact of games in educational contexts to teach vocabulary. With respect to the perception of games in educative contexts, in all the cases games were considered to be a positive contribution to the manner in which vocabulary could be taught according to the participants of different ages and projects. However, none of the analyzed cases used a mixed method approach to validate its effectiveness concerning two different perspectives. Moreover, neither the quantitative nor qualitative aspect of the research were addressed as complementary to the analysis and validation of each other, which makes it difficult to connect this type of methodology - gamification - to this current research.

5.1. OVERVIEW

As mentioned above, the current research utilized mixed method to achieve its validation. In the following sections, both research questions will be analyzed; the quantitative results will be analyzed regarding its causes and limitations and the qualitative results will be exposed after having codified and classified the data in themes.

5.2. RESEARCH QUESTION 1

What is the impact of a gamification approach to vocabulary teaching on the learning and retention of target words?

Regarding research question 1, the results were reported as inconclusive as only one of the post-tests was considered as statistically significant ($-1.911 < 0.05$). It is important to highlight that one of the reasons for this to occur (results that were not expected) was the compulsory change of location for the experiment; the original institution had a more basic program of English and the results in the OQPT were lower. The second scenario were the research was finally conducted was considered more advanced because the English program has been constantly monitored and assessed in terms of efficiency, which has led to a more successful experience in terms of results.

6. RESULTS AND DISCUSSION OF THE QUALITATIVE ASPECT

The qualitative aspect of the research was conducted in order to respond to research question 2 “What is the perception of students towards this method and the impact it has on the way they learn vocabulary?”. Four semi structured interviews were applied in order to know the perception of the participants. The results were able to positively answer the research question as they were conclusive concerning the experience of the participants with the treatment.

To conduct the interviews, four students from the experimental group were selected; two high scorers and two low scorers and the interviews were realized almost a month after having applied the treatment. Although the individuals are considered to be low and high scorers, their results were similar as they fluctuate between 13 and 17 points. All the participants agreed that they had not used games to learn vocabulary before the research was applied. The students declared they had learned through music and internet sources like web sites of their interest but never through games. The particiapants also declared that they felt they learned better with this type of intervention rather than their usual lessons. When asked about the motivation issue of the game, the students claimed they felt motivated during the whole session for different reasons. The students were interviewed one month after having applied the treatment and, as the participants were on holidays by the time of the interview, each interview was held on the phone and lasted twelve minutes.

6.1. MOTIVATION

One of the low score students referred to the motivation issue in the game:

Student 1 (low score): "I was motivated the whole time because there were many things to do in the game like competing with each other, discovering the meaning and drawing of each card and using the deflection cards, all of that helped me to engage with the game."

Student 3 (high score) "Yes, it was very fun to find out the meaning of the words and compete against my other classmates because I am a really competitive person. That motivated me to find out and discover the words, besides, the drawings were really nice, it was fun to play and learn the words."

When asked about their feelings towards the subject itself, the two low score participants answered they felt insecure and anxious when attending lessons of English and they felt confident and motivated in front of the gamified lesson. One of the low score participants said:

Student 2 (low score): "In general, I feel anxious and unconfident because it is hard for me to learn English. I have to pay a lot of attention and be concentrated the whole period in order not to get lost. I have to dedicate much time to the exercises and practice."

6.2. VOCABULARY RETENTION

According to the results, students in the experimental group were able to retain most of the words two weeks after the implementation of the methodology. The four people interviewed declared that the game helped them to remember some of the words that they did not know before having played the game. One of the questions of the interview was related to the participants' own perception towards the vocabulary retention issue. The interviewees declared:

Interviewer: After a couple of weeks of having played the game, did you feel that you could remember most of the words of the game? For example, can you remember the meaning of wings, anvil, and Bishop?

Student 1 (low score): "I think they were 'alas, obispo and... I don't remember the last one but it was not difficult for me because the game helped me with it and as I learned the words by playing and the cards had an image attached to it, it was easier."

Student 2 (low score): "Yes, anvil was 'yunque', wings was 'alas', and bishop was 'obispo'. It is easier for me to learn the words in this manner because i did not have a technique for this before, and after the game I created my own and played with my sister who learned and enjoyed it as well. In my lessons I always find it difficult to learn new words because I only wrote list of words and their meaning in Spanish and I memorized them, but it is easier to do it like this."

Student 3 (high score): "Yes, I can remember a few of them. I know that the ones you told me, they mean 'alas, yunque, and obispo'."

Student 4 (high score): "Yes, I remember all of them. They meant 'alas, yunque, and obispo'. I remember them because of the images and the game helped me a lot with it. Besides, I think I had seen some of them before somewhere else but I did not remember what they meant."

6.3. STUDENTS' PERCEPTION

One of the main objectives of the research was to know the perceptions of the students towards an educative games to foster vocabulary learning. In this case, the objective was to know their preferences and address a comparison between their usual lessons of vocabulary and this treatment. The four participants were asked about their experience with the game regarding its

content, dynamics, and effectiveness in relation to their previous experiences with other manners of learning vocabulary and their formal lessons of English.

Interviewer: "What did you think of the game when you played it?"

Student 1, low score: "It was really fun, I had never learned English in this way and I liked the drawings in the cards."

Student 2 (low score): "I liked it and the fact it was competitive made it more exciting, I did not realize of the time because I was having fun with my friends. That made it more entertaining, that I was playing it with my friends."

Student 3 (high score): "I loved it and was really entertaining. I liked that it was competitive and not only memory flashcards, because that would have made it more boring. Besides, the fact that it was healthy competence made us to put more effort into this"

Student 4 (high score): "I liked the game and the fact that you could play with the cards, that made it more entertaining. Also, it was not slow, it was fast and that made that we were really immersed into the game because it moved fast and you learned the words really fast. Actually, after a couple of rounds I knew all the words and I won the match."

With respect to the preferences of the students in front of usual lessons of English, and in concordance to the findings of Farrah and Shabaneh (2019) and Chen and Chen (2019) who assessed the effectiveness of vocabulary games through flashcards, most of the interviewees declared they preferred this type of initiatives to foster vocabulary learning instead of usual lessons. To the question "if you had to choose to learn vocabulary, would you prefer this method or the usual way in which vocabulary is taught to you?" the participants answered answered:

Student 1 (low score): "The game, absolutely. It was funnier and easier than looking up words in a translator or a dictionary. That is the tedious part of the reading lessons."

Student 2 (low score): "I would say that every person learns differently, each one has to find its method. However, in this way, the ones who find the subject difficult, including me, learned better. For example, I could study one hour with the lists and, then, one hour with the card game."

Student 3 (high score): "I think that the game is the most entertaining manner of learning vocabulary. I am not saying that the lessons are boring, they are entertaining, but with the game is simpler to learn and remember them. Sometimes, the teacher taught me the words and, after a test, I could not remember them anymore."

Student 4 (high score): "this manner, totally. I felt entertained all the time and it was fun to compete and play with my friends. And, if one of us took too long to respond to one of the cards, we helped each other."

6.3. THE GAME

The participants found the game appealing and entertaining as they declared that they felt motivated at whole time. They liked it because of the originality of its design, the design of its animated images, and the fact they could play and compete with their friends. The participants were asked if there was something about the game that they would improve, the responses were:

Student 1 (low score): I would add more words so the game could last more. I think that was something I did not like because there were only rounds of three words for each one and we learned them very quickly and, after that, we did not know what to do because we had learned all the words.

Student 2 (low score): I did not find anything wrong, but I would add more words to it because the rounds passed by too quickly.

Student 3 (high score): mmmm I would not change anything concrete, i liked all of it. The only thing I would change is that I would add more words because it was too short at times.

Student 4 (high score): "I would add more words and, I don't know, maybe verbs or phrases and actions in English."

Finally, the students were asked whether they would perform better if the game had had more words included. They responded:

Student 1 (low score): "Yes. Because, when I was guessing the words in the tests, I had some problems when remembering and identifying the words we had played, so yes, I think I would have remembered fewer of them."

Student 2 (low score): "I think it would have been more difficult. Maybe if you could add something like 3 words and, then, 8 words and, in the end, you add 20 more words, make it progressive so the difficulty of the game could be increased little by little."

Student 3 (high score): "Yes, I think I would remember less of them. It was not difficult for me, but yes, I would remember less words."

Student 4 (high score): "I think I would remember less words, I do not know, they were easy because they were concrete and had an image attached to it. Maybe if you added other words like verbs or something like that, I would remember less words."

The testimonies of the participants were very similar regardless of their scores in the tests. The interviews permit to conclude that the students were engaged during the whole session of the treatment. All the participants responded that they felt motivated with the game because of

its design, images, mechanics, and competitive issue. In relation to the aspects of the game that could be improved, all the students agreed on adding more words to the game so it could be more difficult, lasted longer, and was more competitive.

With regard to other similar studies that have used board games develop EFL learning, a few can be mentioned and compared in terms of its qualitative aspects. Ho, Thien, An, and Vi (2019) assessed the effects of employing a board game of guessing information about other people to foster speaking amongst students of a university in Vietnam. By responding to a semi-structured interview, the participants agreed on positive appreciation of the method in contrast to usual lessons that were considered to be more tedious and repetitive. Furthermore, they felt motivated at all times and were not anxious by the task of speaking in front of their classmates as they usually did in normal lessons. The results are consistent and similar to the perception of the participants in this research as students valued the use of games to learn English.

Calvo-Ferrer (2017) compared the motivational effects of a computer game to teach vocabulary versus a non-gaming tool that replicated the same content. The findings showed that the video game had an impact on the extrinsic motivation and vocabulary learning gains relation of the students as the predisposition of participants to learn vocabulary was higher as they knew beforehand that a game was going to be their learning tool and not a conventional instruction model. In relation to this research, the results were similar in terms of increasing and sustaining motivation of participants in front of educative games and the preferences of them towards this type of methodologies instead of conventional educative models.

7. CONCLUSIONS

The hypothesis that claimed that students will learn more and more valuable vocabulary through a gamified methodology in an EFL classroom was not conclusive as the statement was not accomplished because the results in both groups were not statistically significant.

The treatment increased the motivation amongst participants as the interviewees declared that they felt motivated and engaged during the whole period of they preferred this manner of learning vocabulary instead of their usual lessons. Moreover, the students were engaged in the process during the whole period as they rapidly learned the rules and mechanics of the game and were able to finish it on time.

The fact that the game was comprised of images and the written form of words in English and Spanish influenced the participants and helped them to remember the vocabulary in an easier manner. The students declared that it was easier for them as they paid attention to all the elements present in the game. They could identify the words either by its written form or the image attached to it, therefore, the game could not have been that effective if the design was not comprised on written words and images. Furthermore, it cannot be said that the mechanics had an impact on the way participants learned vocabulary as their results were similar to the control group's results, but the interviewees of the experimental group declared they liked the fact the game was competitive.

Based on the testimony of the participants, the self-perception of the proficiency level of the participants had an impact on the game in which high scorers, who consider themselves to be generally good at English and who enjoyed learning and being in class, accomplished 100% of the points in both post-tests, in contrast to low scorers during the game whose results were not

considerably low but they declared they had a regular perception of their proficiency level, found it particularly complicated and that caused them anxiety, and had to put an extra effort in contrast to other subjects in order to follow the phase of the class.

One of the reasons for the inconclusive results between the different scores in both group may have been, according to the participants' testimony, the amount of words of the game. All the students mentioned the same aspect for the game to be improved because some of them solved the rounds of the game faster than others and it resulted easy for them to remember all the 17 lexical units. They declared that they would have remembered fewer words if the game had contained more of them.

The fact that the game was based on the principles of rote memorization technique served to analyze its impact on the memorization process and how well the words were stored in the sensory, short-term, and long-term levels. Based on the information provided by the interviews, the participants were able to remember three random words from the list (*anvil, wing, bishop*) more than one month after the post-tests. The process of identifying the words through the game permitted the participants to process the visual and written information through the three above mentioned levels of memorization. The game was played through repetitive rounds, therefore, the words were able to be stored in the long-term memory levels.

7.1. LIMITATIONS OF THE STUDY

One of the aspects that affected the significance of the results were the number of words that comprised the game. The total number of vocabulary units was one of the aspects mentioned by all the interviewees because they declared that the game was solved too fast and that, after three rounds, they knew and remembered all the words, which affected the competitive aspects of the game.

One of the aspects mentioned by the participants was the self-perception of their proficiency levels which was consistent with their anxiety towards the subject. In order to control for proficiency level, a quick placement test was applied in order to filter low and high scores, but the idea was dismissed after the results because the number of the participants was considerably low and the implementation of the game would not have been significant with such reduced groups.

At the time this research was being conducted and the experiment was being applied, the country went through a national social clash that jeopardized the implementation of the project. The research had to be moved to another institution in which the conditions such as type of administration, hours of English a week, proficiency level, and strategies were different; these factors are believed to have affected the results which yielded non-significant data between groups. Despite not having validated the hypothesis of the research, the game was effective in teaching vocabulary as the participants were able to connect with the mechanics of the game and responded successfully in their post-tests.

The time frame between the implementation of the game and the post tests may have affected the final results regarding retention as two weeks may not have been a significant amount of time to assess the effectiveness of the game regarding this matter.

7.2. SUGGESTIONS FOR FURTHER RESEARCH

Some topics that might be explored by using the same research method could be the assessment of more concrete words, regardless of the knowledge of students as a group, in other words, to focus the research on vocabulary retention more than in vocabulary learning.

One of the aspects that did not function effectively was the idea of controlling the proficiency level of students. OQPT did not achieve its purpose of filtering low and high scores

because it was neither contextualized nor aligned with the academic and curricular reality of participants as it may have been considered too difficult based on the diverse results in which in some classes it was either regular or too low. An idea to fix this issue could be the development of an instrument based on the contextual curriculum of the institution in which the research would be implemented. Moreover, the existence of English programs is varied and diverse depending on the investment of each educational reality, but what was similar in both schools in which this research was intended to be applied was the lack of a specific vocabulary formation as it only was attached as a part of the reading lesson.

Although the current study was conceived to primarily teach vocabulary, in the development phase it was considered to use role digital games to teach and develop the abilities of writing and reading. The main characteristic of a role game is that the game is developed by using a narrative that evolves as the player makes decisions ann interact with the story which comprise a massive amount of input of written L2. A proposal for a further research would be the planning and implementation of activities related to writing and reading based on role game titles. Furthermore, although time consuming, to design a board game that explores these interactions and activities related to writing and reading would be a suitable manner develop these abilities as it would be contextualized and aligned with the contents, curriculum, and proficiency level of each reality.

Finally, to better assess the effectiveness of similar projects and the impact on long-term memory and its recall, a post-test based on productive ability would test the recall ability and impact of games designed by following a rote memory principle. Rote memory is a language learning strategy that use repetition of elements to have it learned, the design of a test to gather data that uses productive skills (e.g. writing sentences with specific words) could be more

effective to asses vocabulary teaching in a practical manner as participants would be demonstrating a dominion of words by being able to connect them to other lexicon.

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Appendix

Figure 1: Vocabulary Knowledge Scale (VKS)

N°	Word	I) I don't remember having seen this Word before	II) I know I have seen that Word before, but I don't know what that means	III) I have seen that Word before and it means…
1	hook			
2	cough			
3	screen			
4	jaw			
5	sailor			
6	patch			
7	knee			
8	dust			
9	drawer			
10	kick			
11	desk			
12	dot			
13	treasure			
14	ladder			
15	stick			
16	loaf			
17	crowd			
18	plug			
19	lung			
20	wire			

21	**mill**			
22	**coast**			
23	**dish**			
24	**oar**			
25	**fuel**			
26	**hill**			
27	**pocket**			
28	**dock**			
29	**nest**			
30	**curtain**			
31	**duck**			
32	**hat**			
33	**fan**			
34	**ear**			
35	**river**			
36	**sand**			
37	**belt**			
38	**army**			
39	**hole**			
40	**crowd**			

Figure 2: Oxford Quick Placement Test

Oxford University Press
and
University of Cambridge Local Examinations Syndicate

Name: .....

Date: .....

quick placement test

Version 2

This test is divided into two parts:

Part One (Questions 1 – 40) – All students.

Part Two (Questions 41 – 60) – Do not start this part unless told to do so by your test supervisor.

Time: 30 minutes
Part 1

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Questions 1 – 5

- Where can you see these notices?
- For questions **1** to **5**, mark **one** letter **A**, **B** or **C** on your Answer Sheet.

1

You can look, but don't touch the pictures.

A in an office
B in a cinema
C in a museum

2

Please give the right money to the driver.

A in a bank
B on a bus
C in a cinema

3

NO PARKING PLEASE

A in a street
B on a book
C on a table

4

CROSS BRIDGE FOR TRAINS TO EDINBURGH

A in a bank
B in a garage
C in a station

5

KEEP IN A COLD PLACE

A on clothes
B on furniture
C on food

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Questions 6 – 10

- In this section you must choose the word which best fits each space in the text below.
- For questions **6** to **10**, mark **one** letter **A**, **B** or **C** on your Answer Sheet.

THE STARS

There are millions of stars in the sky. If you look **(6)** ..... the sky on a clear night, it is possible to see about 3000 stars. They look small, but they are really **(7)** ..... big hot balls of burning gas. Some of them are huge, but others are much smaller, like our planet Earth. The biggest stars are very bright, but they only live for a short time. Every day new stars **(8)** ..... born and old stars die. All the stars are very far away. The light from the nearest star takes more **(9)** ..... four years to reach Earth. Hundreds of years ago, people **(10)** ..... stars, like the North star, to know which direction to travel in. Today you can still see that star.

6	**A**	at	**B**	up	**C**	on
7	**A**	very	**B**	too	**C**	much
8	**A**	is	**B**	be	**C**	are
9	**A**	that	**B**	of	**C**	than
10	**A**	use	**B**	used	**C**	using

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Questions 11 – 20

- In this section you must choose the word which best fits each space in the texts.
- For questions **11** to **20**, mark **one** letter **A**, **B**, **C** or **D** on your Answer Sheet.

Good smiles ahead for young teeth

Older Britons are the worst in Europe when it comes to keeping their teeth. But British youngsters **(11)** ..... more to smile about because **(12)** ..... teeth are among the best. Almost 80% of Britons over 65 have lost all or some **(13)** ..... their teeth according to a World Health Organisation survey. Eating too **(14)** ..... sugar is part of the problem. Among **(15)** ..... , 12-year olds have on average only three missing, decayed or filled teeth.

11	**A** getting	**B** got	**C** have	**D** having
12	**A** their	**B** his	**C** them	**D** theirs
13	**A** from	**B** of	**C** among	**D** between
14	**A** much	**B** lot	**C** many	**D** deal
15	**A** person	**B** people	**C** children	**D** family

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Christopher Columbus and the New World

On August 3, 1492, Christopher Columbus set sail from Spain to find a new route to India, China and Japan. At this time most people thought you would fall off the edge of the world if you sailed too far. Yet sailors such as Columbus had seen how a ship appeared to get lower and lower on the horizon as it sailed away. For Columbus this **(16)** ..... that the world was round. He **(17)** ..... to his men about the distance travelled each day. He did not want them to think that he did not **(18)** ..... exactly where they were going. **(19)** ....., on October 12, 1492, Columbus and his men landed on a small island he named San Salvador. Columbus believed he was in Asia, **(20)** ..... he was actually in the Caribbean.

16	**A**	made	**B**	pointed	**C**	was	**D** proved
17	**A**	lied	**B**	told	**C**	cheated	**D** asked
18	**A**	find	**B**	know	**C**	think	**D** expect
19	**A**	Next	**B**	Secondly	**C**	Finally	**D** Once
20	**A**	as	**B**	but	**C**	because	**D** if

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Questions 21 – 40

- In this section you must choose the word or phrase which best completes each sentence.
- For questions **21** to **40**, mark **one** letter **A**, B, C or **D** on your Answer Sheet.

21 The children won't go to sleep ..... we leave a light on outside their bedroom.

A except **B** otherwise **C** unless **D** but

22 I'll give you my spare keys in case you ..... home before me.

A would get **B** got **C** will get **D** get

23 My holiday in Paris gave me a great ..... to improve my French accent.

A occasion **B** chance **C** hope **D** possibility

24 The singer ended the concert ..... her most popular song.

A by **B** with **C** in **D** as

25 Because it had not rained for several months, there was a ..... of water.

A shortage **B** drop **C** scarce **D** waste

26 I've always ..... you as my best friend.

A regarded **B** thought **C** meant **D** supposed

27 She came to live here ..... a month ago.

A quite **B** beyond **C** already **D** almost

28 Don't make such a .....! The dentist is only going to look at your teeth.

A fuss **B** trouble **C** worry **D** reaction

29 He spent a long time looking for a tie which ..... with his new shirt.

A fixed **B** made **C** went **D** wore

30 Fortunately, ... from a bump on the head, she suffered no serious injuries from her fall.

A other **B** except **C** besides **D** apart

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31 She had changed so much that ..... anyone recognised her.

A almost B hardly C not D nearly

32 ..... teaching English, she also writes children's books.

A Moreover B As well as C In addition D Apart

33 It was clear that the young couple were ..... of taking charge of the restaurant.

A responsible B reliable C capable D able

34 The book ..... of ten chapters, each one covering a different topic.

A comprises B includes C consists D contains

35 Mary was disappointed with her new shirt as the colour ..... very quickly.

A bleached B died C vanished D faded

36 National leaders from all over the world are expected to attend the ..... meeting.

A peak B summit C top D apex

37 Jane remained calm when she won the lottery and ..... about her business as if nothing had happened.

A came B brought C went D moved

38 I suggest we ..... outside the stadium tomorrow at 8.30.

A meeting B meet C met D will meet

39 My remarks were ..... as a joke, but she was offended by them.

A pretended B thought C meant D supposed

40 You ought to take up swimming for the ..... of your health.

A concern B relief C sake D cause

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Figure 3: Passive Recognition Test

Passive Recognition Test

Name: _____ **Grade:** _____

Select the right translation of each word.

1. Anvil a) Yema b) Clavo c) Yunque d) Destornillador	2. Drawer a) Mueble b) Caja c) Suelo d) Cajonera
3. Lever a) Palanca b) Herramienta c) Palabra d) Tornillo	4. Heel a) Estaca b) Talón c) Tacón d) Tobillo
5. Bishop a) Sacerdote b) Obituario c) Obispo d) Iglesia	6. Plug a) Enchufe b) Electricidad c) Conector d) Chirimoya
7. Loaf a) Rodamiento b) Rodaja c) Lámina d) Motor	8. Mill a) Molino b) Granero c) Gallinero d) Moledor
9. Oar a) Bote b) Remo c) Ramo d) Caña	10. Bench a) Banco b) Reja c) Parque d) Banca
11. Bush a) Planta b) Árbol c) Pastizal d) Arbusto	12. Dock a) Barco b) Muelle c) Puerto d) Mayo

17. Beam a) Luz b) Rayo c) Reja d) Láser	18. Bruise a) Corte b) Moretón c) Herida d) Morado
19. Boar a) Queso b) Jabalí c) Cerdo d) Jabalina	20. Helmet a) Cascada b) Escudo c) Casco d) Protector

Figure 4: Interview Protocol

Interview Protocol

I. Questions related to manners of learning vocabulary

1. Have you learned vocabulary through games before?
2. Do you feel that you learn more words in this way?
3. While you played more rounds of the game, did you feel it easier to remember the words of the game?

II. Questions related to vocabulary retention

1. After two weeks, do you feel that you remember most of the words that were in the game?
2. With this game, do you feel that you learn vocabulary better or is it the same as you usually do?
3. Do you feel that your previous knowledge in English influenced your performance in the game? Was it more difficult or easier for you?

III. Questions related to motivation

1. Did you feel motivated by learning vocabulary in this way?
2. Do you prefer this manner of learning vocabulary or do you prefer normal lessons of English?
3. How do you feel in usual lessons of English? Motivated, anxious?

IV. Questions related to game's mechanics

1. Which part of the game did you like the most?
2. Which is the worst part of the game or what would you improve?

V. Questions related to tests' results

1. If the game had had more words, do you think you would have remembered less of them?
2. What would you say were the reasons for your results in the game?

Figure 5: Card Game Sample



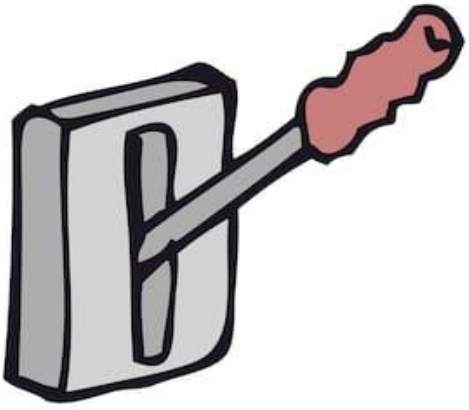
Yunque



Cajonera



Palanca



Tacón

