



**Universitat**  
de les Illes Balears

# Teaching and Learning Vocabulary through Games and Translation in the EFL Classroom: A Case Study

Laura Andreu Pirrie

## **Master's Thesis**

Master's degree in Teacher Training  
(With a speciality/Itinerary in English)

at the

UNIVERSITAT DE LES ILLES BALEARS

Academic year 2016-2017

2<sup>nd</sup> June 2017

*UIB Master's Thesis Supervisor Susana María Cortés Pomacóndor*

## **Abstract**

Vocabulary teaching and learning in the EFL classroom is no longer overshadowed by grammar instruction. Its increase in status has led to research being conducted to investigate the effectiveness of different methods used to learn and retain vocabulary, among which are games and translation. However, the amount of research devoted to determine their effectiveness appears to be rather limited. These two methods are very different in nature and provoke differing opinions as to their worth as effective vocabulary teaching and learning tools.

This study investigates the effect of vocabulary games and translation on the vocabulary learning and retention of twenty-six students aged between twelve and thirteen. They were organised into two groups, an experimental and control group. The former was exposed to games and the latter to translation. Quantitative data (tests) and qualitative data (classroom observation and interviews) were collected to answer the study's research questions.

Quantitative data revealed that both methods were effective to learn and retain vocabulary, but the experimental group performed better than the control group. However, *t*-tests carried out to compare the results demonstrated that the difference in the majority of the tests was not statistically significant. The qualitative data showed that both methods had a positive impact on students' participation and motivation. However, games seemed to motivate and encourage the vast majority of the students to participate, irrespective of their proficiency level whereas translation appeared to stimulate mostly the high achievers. These findings may encourage EFL teachers to incorporate vocabulary games more often in their lessons and those who had negative views regarding translation may reconsider its value.

**Keywords:** L2 vocabulary teaching and learning, vocabulary games, vocabulary translation, immediate and delayed learning.

## List of figures

Figure 1: Extract from productive pre-test .....	27
Figure 2: Extract from receptive pre-test .....	28
Figure 3: Example of one of the flashcards .....	29
Figure 4: Example of image and clues .....	30
Figure 5: Example of flashcards hung on walls .....	32
Figure 6: Example of envelope containing small images.....	33
Figure 7: Overview of receptive test results .....	42
Figure 8: Overview of productive test results.....	43
Figure 9: Pre-test receptive and productive experimental and control groups..	44
Figure 10: Post-tests productive and receptive experimental and control groups .....	44
Figure 11: Delayed test receptive and productive experimental and control groups .....	45
Figure 12: Receptive and productive post-tests and delayed test experimental group .....	46
Figure 13: Receptive and productive post-tests and delayed test control group .....	46

## Contents

1. Introduction.....	1
1.1 Justification .....	1
1.2 Objectives .....	3
2. Literature review .....	3
2.1 Theoretical background.....	3
2.1.1 Vocabulary teaching and learning.....	4
2.1.1.1 Vocabulary learning and retention .....	4
2.1.2 Games .....	7
2.1.2.1 Definition of game.....	7
2.1.2.2 Games in language teaching and learning .....	9
2.1.2.3 Types of games .....	11
2.1.2.4 Value of games.....	12
2.1.2.5 Research into vocabulary games .....	13
2.1.3 Translation in language teaching and learning .....	16
2.1.3.1 Value of translation .....	17
2.1.3.2 Research into vocabulary translation.....	19
2.2 Research questions, hypothesis and rationale.....	21
3. Case study .....	23
3.1 A case study: assessment of two methods to teach and learn vocabulary .....	23
3.1.1 Participants and setting.....	23
3.1.2 Method.....	24
3.1.2.1 Material and procedures .....	24
3.1.2.1.1 Target vocabulary.....	25
3.1.2.1.2 Session 1: Pre-test .....	26
3.1.2.1.3 Session 2: Introduction of vocabulary (landscape places) through games .....	28
3.1.2.1.4 Session 2 and 3: Introduction of vocabulary (landscape places and places in town) through translation.....	30
3.1.2.1.5 Session 3: Introduction of vocabulary (places in town) through games .....	32

3.1.2.1.6 Session 4: Revision of target vocabulary with experimental group.....	33
3.1.2.1.7 Session 4: Revision of target vocabulary with control group .....	34
3.1.2.1.8 Session 5: Delayed test.....	34
3.1.2.2. Data collection .....	34
3.1.2.2.1 Tests .....	34
3.1.2.2.2 Classroom observation.....	35
3.1.2.2.3 Interviews .....	36
3.1.2.3. Data analysis .....	37
3.1.2.3.1 Quantitative data .....	37
3.1.2.3.2 Qualitative data .....	37
3.1.3 Results and discussion .....	38
3.1.3.1 Results for research question one.....	38
3.1.3.2 Discussion research question one.....	40
3.1.3.3 Results for research question two .....	41
3.1.3.4 Discussion research question two .....	47
3.1.3.5 Results for research question three.....	49
3.1.3.6 Discussion research question three .....	51
4. Conclusion.....	52
4.1 Brief summary of results .....	52
4.2 Pedagogical implications.....	53
4.3 Limitations and strengths .....	54
4.4 Future research.....	54
4.5 Conclusion .....	55
5. References.....	56
6. Annexes .....	59
Annex A: Target vocabulary .....	59
Annex B: Tests.....	60
Annex C: Material games session 2.....	65
Annex D: Material games session 3.....	69
Annex E: Statistical tables.....	72

## **1. Introduction**

### **1.1 Justification**

Given that some authors suggest that vocabulary is more immediately useful to communicate than grammar (Scrivener, 2011) and that vocabulary errors can be more misleading than grammar ones (Hedge, 2000), research on vocabulary learning and retention is worthwhile. The strategies used to teach vocabulary may result in some students having a rather small vocabulary size. Some research has been conducted on the different strategies that can be employed to improve students' learning and retention of vocabulary, among them, songs, posters, stories, games and translation. However, not all the aforementioned strategies have been subjected to the same amount of research and attention.

Vocabulary games seem to be highly acclaimed by most teachers while vocabulary translation seems to be generally rejected at this moment in time. Although they are very different in nature, they appear to have something in common: their effectiveness (games) and ineffectiveness (translation) to learn and retain lexis seem to be taken for granted as not a great deal of research has been conducted to sustain those strong viewpoints.

Regarding games, their popularity in EFL classrooms seems to be increasing. Nevertheless, they appear to be used more frequently as time fillers rather than as educational tools (Wright, Betteridge & Buckby, 2006). It remains to be seen whether their potential is exploited enough. In addition, in general, research on vocabulary games seems to be more aimed at primary school pupils than high school learners. As for translation in foreign language classes, it lost ground to the communicative approach in the last decades of the 20th century (Koletnik, 2012). However, some high schools still resort at times to this approach. Its use as a teaching tool has become highly controversial.

I intend to analyse the effectiveness of vocabulary games vs. vocabulary translation to discern which method brings more positive results in terms of vocabulary learning and retention. The rationale for comparing those two methods will follow. In the last few years, I have become highly interested in research on vocabulary learning and retention. Following the completion of my

degree in English Studies, I was given the opportunity to teach English through play to young Spanish children whose ages ranged between two and seven. I was forbidden to use their mother tongue so translation was never employed as a teaching tool. After a year, they were able to understand more or less what was being said. I came to realise how effective games were in the learning and retention of lexis.

Following this experience, I moved on to study an MSc in TESOL at the University of Stirling and my master's thesis (Andreu, 2015) was aimed at analysing the potential of games to acquire and retain vocabulary with primary school Spanish students. The study was conducted in two different schools from which three fifth year classes were randomly selected to become the experimental groups and two classes the control groups. The experimental groups were instructed through games for one week and the control groups continued with their regular classes. Then they all sat a test. The outcome of which was that the experimental groups obtained better results than the control groups although the difference was not statistically significant. This may have been due to time constraints.

During the time spent at my teacher training placement in December, I learnt that some students had problems learning vocabulary and others, although able, did not show much interest in doing so. I enquired as to what methodology was being used and I was told that to introduce the target vocabulary at the beginning of the unit, they resort to the vocabulary reference section in the students' workbook and translate the vocabulary. It appears in the form of a list and a space is provided next to each word where they write the first language (L1) equivalent. Shortly after they sit a vocabulary exam in which they are asked to translate twenty words from Catalan into English. The vocabulary is then revised when encountered in the unit. In addition, one session is devoted to revising the vocabulary through the translation method. Then they sit the Use of English exam which includes some gap filling exercises which have to be completed with the unit's target words. Although translation is not the only strategy used to teach and learn vocabulary, it plays an important role in the students' vocabulary learning process.

All the aforementioned information has triggered my decision to analyse the effectiveness of games versus translation with high school students this time round. The objectives of this research can be found below in more detail.

## **1.2 Objectives**

This research seeks to learn more about the potential of vocabulary games and vocabulary translation to enhance high school students' vocabulary learning and retention. It is not my aim to discredit the translation method, since actually the target students have obtained a decent level of English using this method. My aim is to ascertain which method works best. The results obtained from the comparison of these two methods will not only be useful for the school which has participated in the research since we may be able to generalise the findings of the study to similar contexts.

It would have been impossible to undertake this research without the consent and cooperation of the school where I was conducting my teacher training. I was given the opportunity to observe how vocabulary was presented and revised through translation while observing how my mentor conducted her classes. I was also able to undertake this procedure myself which gave me an insight into this teaching method. As I was given free rein to choose the methodology to present and revise the target vocabulary during my teaching period at the school, I decided to use both games and translation to compare their effectiveness.

## **2. Literature review**

### **2.1 Theoretical background**

Prior to undertaking this research, a thorough search and evaluation of the available literature on the topic was conducted. Firstly, the published work on vocabulary teaching and learning will be presented. Secondly, a discussion of the information encountered regarding games and translation in language teaching will be provided. Finally, the available research on vocabulary games and vocabulary translation will also be addressed.



### **2.1.1 Vocabulary teaching and learning**

The status of vocabulary teaching and learning has changed throughout the years. Nowadays, most coursebooks include numerous sections devoted to the teaching of the unit's target vocabulary which highlights the importance awarded to vocabulary in foreign language learning. However, vocabulary teaching has traditionally taken a back seat to grammar teaching, especially when structural linguistics and audiolingualism were at the height of their popularity (Nunan, 1999).

In order to understand the aforementioned, it is important to be acquainted with the terms structural linguistics and audiolingualism. McArthur (2005: n.p.) defines structural linguistics as "an approach to linguistics which treats language as an interwoven structure, in which every item acquires identity and validity only in relation to the other items in the system." Harmer (2007: p. 64) explains that audiolingualism is a method based on "habit-formation through constant repetition of correct utterances, encouraged and supported by positive reinforcement." Vocabulary teaching clearly played a secondary role. Lewis (1993: p. 89) reinforced this claim by stating that "lexis is the core or heart of language but in language teaching has always been the Cinderella."

However, according to Thornbury (2002), the attention devoted to vocabulary increased, especially since the emergence of the communicative approach in the 1970s and the appearance of the lexical syllabus, and the realisation of the importance of lexical chunks supported by findings from corpus linguistics.

#### **2.1.1.1 Vocabulary learning and retention**

Nation (2013) states that words have different learning burdens. This concept refers to "the amount of effort required to learn [them]" (p. 44) which is determined by the learner's first language, i.e. the learning burden will be lighter for learners whose mother tongue is similar to the L2 and heavier for those whose languages completely differ to the L2. Thornbury (2002) points out that some words have a lighter learning burden than others. For example, cognate

words, i.e. words which are orthographically and/or phonologically similar to its equivalents in another language, belong to this group (Tonzar, Lotto & Job, 2009). Nevertheless, learners must watch out for 'false friends', i.e. words which share a similar form, but not a similar meaning. Thornbury (2002) puts forward that there are different aspects which make some words more difficult to learn than others: "pronunciation, spelling, length and complexity, grammar, meaning, range, connotation and idiomaticity" (pp. 27-28).

Nation (2013) points out what is involved in knowing a word. It is important to know its *form* (e.g. recognising the word when it is heard, knowing how it is written and spelled), *meaning* (e.g. recognising the word's meaning) and *use* (e.g. where, when and how often would we expect to find it). However, as Thornbury (2002: p. 16) states "word knowledge is incremental and takes time." He mentions that a proficient speaker may not know all the aspects of a specific word. In addition, a learner may know a word receptively, but not productively. Nation (2013: p. 47) explains that "receptive vocabulary use involves perceiving the form of a word while listening or reading and retrieving its meaning" whereas "productive vocabulary use involves wanting to express a meaning through speaking or writing and retrieving and producing the appropriate spoken or written word form." Thornbury (2002) states that students' receptive knowledge is larger than their productive knowledge and that the former usually precedes the latter.

There are varied and contradictory views on the most productive way of learning vocabulary. Nation (2013) points out that vocabulary acquisition is more effective when the interference of synonyms, antonyms or words that belong to the same lexical set does not take place. Words with a similar form or meaning are more challenging to learn together as learners find it difficult to differentiate them. However, Ur (1996) puts forward that people try to group words depending on their meaning or try to associate them. She suggests that these strategies can be used when teaching vocabulary.

In this line, Papathanasiou (2009) conducted research to discern whether it is more effective to present together vocabulary which is semantically related or unrelated. The participants differed in terms of age and language proficiency.

The results obtained showed that adults (beginner level) did better when the words were unrelated and children (intermediate level) obtained similar results in both strategies. She therefore concluded that at beginner level, it may be more effective to present together vocabulary which is not related. This study has taken into account the language proficiency variable, but seems to neglect an important variable which is age. It does not mention whether the age difference has any effect on the results obtained.

Thornbury (2002: p. 17) explains that words are stored in our mental lexicon, understood as:

an overlapping system in which words are stored as 'double entries' – one entry containing information about meaning and the other about form. These individual word entries are then linked to words that share similar characteristics, whether of meaning (...) or of form (...) – or both (...).

World knowledge (general knowledge) and memory (personal experiences) are also linked to this system. Consequently, it is improbable that two people will share the same word knowledge (Thornbury, 2002). For example, if a traveller has visited Norway and has actually seen a fiord, he/she may have a richer knowledge of this word than someone who has not had this same experience. A clear advantage for the person who has visited the fiord, as opposed to another who may have only read about it, is that he/she will have a more elaborated mental representation which may help to retain the word. In addition, if the traveller had a bad experience while visiting the fiord, this word may have a negative connotation for him/her. On the contrary, a rewarding and pleasant experience will create a positive connotation. This example reinforces Thornbury (2002)'s claim that it is difficult to find two people who have an identical word knowledge.

Thornbury (2002) also states that researchers make a clear distinction between short-term store, working memory and long-term memory. He then moves on to explain these three different systems. The short term-store can only retain information for a few seconds. However, learning vocabulary entails more than retaining words in one's brain for a short period. Words then enter

the working memory where different cognitive operations take place. They stay in this system around twenty seconds before entering the long-term memory, but sometimes they are forgotten rapidly. In order to avoid this, some principles need to occur, among them: “repetition, retrieval, spacing, pacing, use, cognitive depth, personal organising, imaging, mnemonics, motivation, attention and affective depth” (Thornbury, 2002: pp. 24-26).

Regarding cognitive depth, Thornbury (2002) mentions that the more mental operations the learner applies to words, the better these will be remembered. He also states that the word is remembered more successfully if the mental operations are demanding. Other authors also tackle this issue. Hedge (2000: p. 121) states that cognitive psychologists have suggested that “input becomes *intake* if there is a depth of processing.” She moves on to explain that the word will be better remembered if the learner conducts apart from a basic analysis, a more challenging one and relates it to his/her existing knowledge.

It should be taken into account that some words can be recalled and used immediately whereas others are difficult to remember (Hedge, 2000). In addition, some words can be partially remembered. For example, speakers may experience the ‘tip of the tongue effect’, i.e. “recalling something of the word but not its precise form” (Hedge, 2000: p. 116). According to Thornbury (2002), forgetting may take place when other learning interferes, i.e. some old words are forgotten when new words are learnt, and when words are not revised sufficiently. If students lose concentration during the process of storing the word, forgetting can be rapid. However, it will occur more slowly if the word is already in the mental lexicon, but has not been used or seen frequently (Hedge, 2000).

## **2.1.2 Games**

### **2.1.2.1 Definition of game**

It is highly important to define ‘game’ as one of the starting points of this research since there are many definitions available in the field of ELT and although most include the same elements, there can be small differences.

Three definitions have been chosen from a wide variety to compare and contrast. The first one belongs to Gibbs (1978, cited in Rixon, 1996) who defines a game as an activity in which students cooperate or compete to achieve the objectives following the imposed rules. The second one has been taken from Hadfield (1998: p. 4) who defines it as “an activity with rules, a goal and an element of fun.” The last definition has been extracted from Wright and his colleagues (2006) who use three adjectives to define a game. They refer to a game as an entertaining, engaging and challenging activity where play and interaction takes place amongst the learners.

The aforementioned definitions show the recurrence of some properties. Firstly, they all define it as an activity. Secondly, all but Wright and his colleagues (2006)’s definition mention the element of rules. Games always contain rules and this may have been taken for granted in Wright and his colleagues (2006)’s definition. Thirdly, all but Wright and his colleagues (2006)’s definition make reference to objectives/goals. Toth (1995) highlights the importance of students being acquainted with the goal of the game from the very beginning. In addition, she states that the students should also be provided with the instructions before beginning the game to avoid problems afterwards. She suggests the teacher asking a few students to come to the front of the class to give a demonstration first before handing out the material to the remainder of the students. They may not listen to the instructions and become distracted if they are given the material first. Finally, all but Gibbs (1978, cited in Rixon, 1996)’s definition include the element of fun. Wright and his colleagues (2006) give importance to this element by using the adjectives “entertaining and engaging” to define games.

While it is true that different authors will provide different definitions, there seems to be a few elements that are central to games and which coincide with the elements included in Hadfield (1998)’s definition. This does not mean that the three elements aforementioned are the only ones, but they appear to be the main ones. Other elements may be added to these three depending on the nature of the game (e.g. cooperation vs. competition and degree of difficulty).

Having analysed the aforementioned definitions and having reached the conclusion that there are three basic elements found in most games, the games used for this study were devised in accordance with Hadfield (1998)'s definition. In other words, rules, goals and fun were included in the activities prepared enabling them to become games as such and to differentiate these from any other type of activity. Choosing a definition which may appear archaic as it dates back to the beginning of the 21<sup>st</sup> century may attract the readers' attention. However, this definition seems to still prevail as most authors refer to rules, goals and fun when defining games.

#### **2.1.2.2 Games in language teaching and learning**

Most resource books when discussing games in English Language Teaching distinguish between those used to improve grammar, vocabulary knowledge, speaking skills, etc. They include different examples to enhance the skills aforementioned, but the literature dealing with each type of game is rather limited. Most authors talk about 'language games' which encompasses grammar and vocabulary games, speaking games, etc. For this reason, most of the following sections deal with games in a more general manner. However, the discussion will be narrowed down to vocabulary games when reaching the end of the analysis of the available literature on games.

It is important to mention that most of the literature on games in English Language Teaching is oriented towards primary education which seems to suggest that secondary school students are too old to play games. As Gaudart (1999: p. 283) explains, "[teachers] apparently believe that once a learner reaches puberty, the learner loses all desire to play games." She then moves on to explain why this idea is not true. Even though some resources which will be mentioned refer to younger students, the information provided can be generalised and applied to the participants of this research or to any learners regardless of their age.

Wright and his colleagues (2006) state that learning a language is challenging as it demands from learners a great effort to undertake different tasks, from understanding to using the new language while speaking and

writing. They put forward that effort cannot be intermittent, i.e. students' work and interest must be sustained throughout the learning process which can be achieved by using games in the classroom. However, Wood and Attfield (2005: p. 16) claim "society has a general mistrust of play in educational contexts and the lack of a precise operational definition of play ensures that it is viewed as the opposite of work."

Some teachers, although they may believe in the potential of games, do not seem comfortable playing them in class. Toth (1995: p. 7) describes some of the worries revealed by teachers regarding games: "the children get too excited and then they don't listen to my instructions" or "I have too many children in my class to control the language they are using." Toth (1995: p. 8) also puts forward that games are sometimes perceived as "relaxation activities in which the children are not really 'studying' English." Games are not taken seriously and they are "often severely marginalised, and tend to be used for some ephemeral pedagogic purpose – not as a means of learning" (Cook, 2000: p. 183, quoted in Chou, 2014: p. 286). However, Toth (1995) argues that classes include children with different learning styles and playing a game may be more beneficial for some students than conducting other activities. It is important though to ensure that the games have clear teaching and learning objectives (Chou, 2014).

Adolescent students may need at times extrinsic motivation to carry on studying. Games can provide this motivation as we will see when discussing the value of games. Dörnyei (2001) states that there is a clear correlation between motivation and school success. Consequently, if games motivate students and this motivation in turn makes a positive contribution to their academic success, it may be high time to bring about a change in the atmosphere of mistrust surrounding play and therefore games. Games should be put to the test and the results obtained analysed to draw conclusions based on concrete evidence. This will be conducted in the present research.

### 2.1.2.3 Types of games

We can refer to different classifications of games based on the aspect being analysed. Depending on the type of learning the teacher intends to encourage in the classroom, Hadfield (1998) puts forward two types of games, i.e. cooperative and competitive games. In the former, “players or teams work together towards a common goal” (p. 4) and in the latter “players or teams race to be the first to reach the goal” (p. 4). According to Wright and his colleagues (2006: p. 1-2), games do not necessarily need to include the competition element and they state the following:

Competition may be stimulating for some, but it can also be destructive, making players anxious, with losers categorising themselves as ‘no good’ and the winners (...) as ‘very good’. Neither of these things may be true, and neither helps learning.

If games are played in competing groups, these must include students of different abilities (Wright et al., 2006). In this way, students can help each other and achieve the goal of the game. It is very common to find games played in teams which require cooperation amongst the team members to beat their opponents. This seems to suggest that, in some occasions, cooperative games include competition as well.

Games can also be classified depending on their aim. Hadfield (1998) provides a classification specifically for vocabulary games depending on their aim. She distinguishes between linguistic games and communicative games. She states that the former’s aim is to recall the correct word, i.e. linguistic accuracy, whereas the latter’s aim is not accuracy, but to conduct a task which requires the use of the L2 to be completed.

Wright and his colleagues (2006) provide a classification of games depending on the students’ mental processes which take place while playing the game: a) care and share; b) do: move, mime, draw, obey; c) identify: discriminate, guess, speculate; d) describe; e) connect: compare, match, group; f) order; g) remember and create. Lewis and Bedson (1999) also provide a classification but based on the games’ most prominent characteristic: movement games, card games, board games, dice games, drawing games,



guessing games, role-play games, singing and chanting games, team games and word games. On studying these classifications, it can be deduced that each author dealing with vocabulary games will group games differently based on their particular way of making connections.

Lewis and Bedson (1999) remind the readers to differentiate between two types of games: rousing and settling games. They explain that the former are used to enliven a class, e.g. games which require the students to move, and the latter to relax the class, e.g. games which involve doing crafts.

#### **2.1.2.4 Value of games**

Games can bring many advantages and disadvantages. However, the former seem to outweigh the latter. Gaudart (1999) mentions two aspects which preoccupied future teachers: noise and space. Firstly, playing games which encourage speaking inevitably brings noise to the classroom. Secondly, some classes present space constraints and some are difficult to reorganise to play games. Teachers also seem to believe that playing games is time-consuming, so other activities are used which take up less time (Al Neyadi, 2007).

After having read different books on games, five main arguments have been extracted which reinforce their value:

- Context
- Fun, motivation and involvement
- Variation
- Versatility
- Repetition

Regarding context, games enable the teacher to create a context which makes the language useful and meaningful (Wright et al., 2006). This context gives even reluctant children a reason to speak (Lewis & Bedson, 1999). Games are fun and can be used to motivate and involve the learners. According to Lewis and Bedson (1999), the mere fact that games are fun and children enjoy them, makes it a strong reason for including them in the teacher's repertoire. In addition, according to Wright and his colleagues (2006), students are motivated and involved when playing games which probably results in them learning the

language better than when the teacher uses drills. Games provide variation (Lewis & Bedson, 1999), an important aspect to sustain the students' interest and involvement (Harmer, 2007). Besides, games are versatile, i.e. they can be employed to present target language, to practise it, to rouse or settle the class, etc. (Lewis & Bedson, 1999). Games provide repetition of language items, which contributes to the mental processes of retention and remembering (Harmer, 2007).

#### **2.1.2.5 Research into vocabulary games**

Taking into account the number of authors who claim the positive value of games in vocabulary learning, the research conducted to prove this does not seem to be as extensive as might be expected. In addition, most of the research has been carried out in Asia with a high proportion focusing on primary school pupils. This raises the issue of whether the findings can be generalised to other contexts. Different studies published on the topic in question will be presented below. From all the studies encountered, we will only focus on those involving participants whose ages range between ten-eleven to seventeen-eighteen.

All the available research on vocabulary games seems to be set up in a similar fashion. In order to explain what the different studies have in common, four of these will be presented and analysed to reach some conclusions. The first one is Chou (2014), the second one is Mehregan (2014), the third one is Alemi (2010) and the fourth one is Rohani and Pourharib (2013). These four studies investigated the effectiveness of games to expand students' vocabulary, but some added other elements or variables which are worth mentioning.

Chou (2014) did not only investigate the effectiveness of games, but also of songs and stories to expand the vocabulary of seventy-two Taiwanese primary school pupils (aged ten to eleven) and to motivate them to learn English. In addition, the researcher also analysed the influence of different test techniques on the learners' vocabulary test outcome. Mehregan (2014) also enquired into the potential of games on the vocabulary acquisition of Iranian learners whose ages ranged between ten and fifteen. Moreover, the author also

attempted to analyse if there were any differences between males and females in terms of vocabulary learning through games.

Alemi (2010) and Rohani and Pourharib (2013) also conducted a study to ascertain the effectiveness of vocabulary games with one hundred pupils aged between thirteen and fourteen and with thirty fifteen-year-old Iranian girls, respectively. However, they did not study the effect of other variables or elements. Rohani and Pourharib (2013)'s study could be considered a small scale study as its number of participants was rather low in comparison with the other studies. In addition, their participants were all females which differed from the other researches.

All the studies but for Chou (2014)'s grouped the students into experimental and control groups. The students in the former were taught through games and the latter continued with their regular classes. This was conducted in this manner to discern whether the experimental group obtained better results than the control group. Chou (2014) may not have proceeded in the same manner as she had students of different ages who were divided into different groups according to their age. However, it may be difficult to draw reliable conclusions without having a control group.

Having reflected on the importance of having two groups to compare the results and draw conclusions, the present research also used an experimental and control group to discern which method (games or translation) was more effective. The experimental group was taught through games and the control group through translation (the method regularly used by the participants' teacher).

In Chou (2014)'s study, children played three different games: Monopoly, Twister and Crossword. In Mehregan (2014)'s study, the experimental group students played four games: Hangman, Flash Card Memory Game, Bingo and Odd Man Out. In Alemi (2010)'s research, the experimental group also played a few games, including Twenty Questions, Charades, Definition Games, Passwords and Crossword Puzzles. They all seem to be popular games and therefore the students may be familiar with them. This may bring advantages, but also disadvantages. Students may feel comfortable with these games as

they will have probably played them before in their mother tongue, but at the same time those who enjoy a challenge may become bored.

Regarding data collection, most authors used tests (quantitative data) to gather the relevant data to answer the research questions. However, Chou (2014) used a mixed methods approach to collect the necessary data. She used tests and a self-assessment questionnaire to gather quantitative data and qualitative data were obtained through classroom observation and interviews. This allowed Chou (2014) to obtain information that went beyond numbers. The present research also used a mixed methods approach to collect more in-depth information. Chou (2014), Mehregan (2014), Alemi (2010) and Rohani and Pourharib (2013) asked all the students to sit a pre-test to learn whether the experimental and control groups were familiar with the same number of words before beginning the research. A post-test followed and the results were compared. Most used *t*-tests to learn whether the difference was significant.

Chou (2014) explains that there was a correlation between the quantitative and the qualitative data results. Regarding quantitative data, the results improved greatly from the pre-test to the post-test. The students performed better in 'matching' and 'true and false' exercises than in the 'anagram with picture' and 'gap-filling with pictures'. Test techniques therefore had an impact on the tests' outcome. These results aided in my decision to use a matching exercise in the receptive part of the tests. As to the qualitative data, the field notes showed that the students responded well to using games to learn vocabulary. In addition, they also revealed that they preferred movement games rather than more relaxed games. The self-assessment questionnaire showed that the games aided them to memorise the target vocabulary and to expand their vocabulary knowledge.

The results obtained from Mehregan (2014)'s and Alemi (2010)'s study showed that games were an effective tool. The difference between the scores obtained by the experimental and the control group were statistically significant. The experimental group did much better than the control group. However, regarding Mehregan (2014)'s sex (male or female) variable, the results showed that the difference in terms of vocabulary acquisition between males and

females was not statistically significant. Rohani and Pourharib (2013) did not obtain as encouraging results as the other authors. All the students improved, but the difference between the experimental and control group was not statistically significant.

We can clearly observe a few research tendencies in the four analysed studies. Among these, the way in which the research of the four authors was set up and the materials used. In addition, the results obtained were similar. All this information was taken into account when preparing the present study.

### **2.1.3 Translation in language teaching and learning**

Foreign language teaching underwent some changes during the 20<sup>th</sup> century, especially with the advent of the communicative approach. Its emergence and the status it received was one of the most important reasons for the general neglect of the students' L1 and the exclusion of translation from language teaching (Koletnik, 2012). However, as Koletnik (2012: p. 2) states "translation never went away completely; it patiently waited for a time when the language teaching community would again discover synergies between translation and established approaches, thence reassess its lost potential."

Marqués-Aguado and Solís-Becerra (2013) state that translation has recently regained popularity. However, the use of translation in class still seems to be highly controversial. Some authors claim that translation helps in the process of learning a second or foreign language while others believe it is detrimental. For the time being, we will deal with the criticism and in the next section, the value of translation will be presented.

Fernández-Guerra (2014) deals with the criticisms against translation in the foreign language classroom. She mentions arguments and assumptions put forward by different authors against translation as a teaching tool. Among these, we can find the idea of the artificiality of translation and the prominence of reading and writing over speaking (Zabalbeascoa, 1990, cited in Fernández-Guerra, 2014). Another argument is that translation encourages the belief that there is a one-to-one correlation between the L1 and L2 (Malmkjaer, 2010, cited in Fernández-Guerra, 2014). In fact, there may not be an exact equivalent in the

L1 for the L2 word (Thornbury, 2002, cited in López-Jiménez, 2010). A further argument is that if the L1 is used, the students will be provided with less input in the L2 and also the use of the two languages can cause interference (Pan and Pan, 2012, cited in Fernández-Guerra, 2014). Moreover, translation is tedious (Duff, 1989, cited in Fernández-Guerra, 2014) and can cause demotivation amongst the students (Carreres, 2006, cited in Fernández-Guerra, 2014). However, according to Fernández-Guerra (2014), recent research has proven that translation can be useful to learn a foreign language.

### **2.1.3.1 Value of translation**

Some authors are putting forth arguments to reconsider the value of translation as a tool to teach and learn foreign languages. Among these, we can find Cook (2011) who presents his arguments in favour of using translation in the classroom and Marqués-Aguado and Solís-Becerra (2013) who also mention its advantages. Having read and analysed the advantages of using translation put forward by these authors, a list of the main advantages will be first presented and then explained. Translation:

- can be used for diverse purposes.
- enables connections between new and prior knowledge.
- encourages noticing and language awareness and spotting differences/similarities between the L1 and L2.
- can be useful to build positive student-teacher relationships and to control the class.
- enables the coexistence of the first language identity and bilingual identity.
- encourages participation and is highly rated by the students.
- can be useful to lessen students' anxiety.
- can improve students' L1 through contrastive analysis.
- fosters interference as a learning opportunity.

Cook (2011) states that translation can be used to help students with their learning process, practise what they have learnt in class, pinpoint possible problems and test their knowledge. He seems to suggest that translation can be

used for diverse purposes, i.e. translation is versatile. He also mentions that translation enables students to connect new knowledge to prior knowledge, i.e. make connections between the target language and their first language. In fact, Koletnik (2012) puts forward that translation always occurs when students are learning new L2 vocabulary since they relate the words to their first language. This idea suggests that translation is a natural phenomenon when learning new lexis. Nation (2013) also reinforces this idea by claiming that with students who have a low proficiency level, the L2 words are connected to their corresponding L1 words although the L2 words have not been learnt together with the L1 words.

Cook (2011) also states that translation encourages two important abilities in language learning: noticing and language awareness and it also draws attention to the differences and similarities between the target language and the L1. He also adds that translation assists in the creation of a positive student-teacher relationship and helps the teacher to control the class. He finally mentions that translation enables the coexistence of the first language identity and bilingual identity.

Marqués-Aguado and Solís-Becerra (2013) state that translation has been said to promote participation amongst the students and to be highly rated by language learners (Pegenaute, 1996, cited in Marqués-Aguado and Solís-Becerra, 2013). This increase in participation and the attractiveness of this method may be due to the fact that the translation method may be more accessible to all the students than other methods. In addition, using the L1 in classes with learners who have a low proficiency level may be useful to lessen their anxiety (Vermes, 2010, cited in Marqués-Aguado and Solís-Becerra, 2013). What is more, using translation may also result in students improving their L1 generally by means of conducting contrastive analysis (Marqués-Aguado and Solís-Becerra, 2013), i.e. comparing two languages to determine their differences and similarities. The interference which takes place between the L1 and L2 can be seen as an opportunity to foster learning (Cuéllar Lázaro, 2005, cited in Marqués-Aguado and Solís-Becerra, 2013) instead of it being

viewed as a detriment, which may lead to lessening interference (Cuéllar Lázaro, 2004, cited in Marqués-Aguado and Solís-Becerra, 2013).

### **2.1.3.2 Research into vocabulary translation**

Research has been carried out to test the effectiveness of using translation to improve different language skills. However, there does not seem to be much published research on the impact of vocabulary translation on students' learning of vocabulary. The little research encountered can be found below.

Alroe and Reinders (2015) sought to test the results obtained from previous research which claimed that using translation to learn new words was more effective than learning these from context (words appearing in L2 sentences). One thousand and three first year Thai university students participated in the study. They were distributed into three groups, each dealing with vocabulary differently. One of the groups used translation pairs (English word and Thai word), another group had the target words underlined in English sentences together with an illustration and the third group had the same material as the second group plus the target words translated into the L1. The students sat a post-test in which they had to fill in the gaps and translate. The results obtained from this test showed that the two groups that learnt new words from context outperformed the group that used translation pairs. Other findings also took place, such as that translating from English into their native language was easier than vice versa.

In the next section, the research questions together with a hypothesis and a rationale for each of them will be encountered. The hypothesis provided for the research question as to what method will be more effective (games or translation) was partially influenced by the results obtained in Alroe and Reinders (2015)'s study. According to this study, the students who used translation pairs obtained worse results than those who learnt the words from context. The control group of the present study could be said to use translation pairs to learn vocabulary. Consequently, my hypothesis was that the students who played games would do better than the ones who learnt words through the translation pairs method. This method cannot provide a meaningful context in



which words can be learnt by using context clues. However, the meaning of words can be learnt in games which provide a context.

Hummel (2010), acquainted with the possible benefits of translation on vocabulary learning reported by some research, attempted to further investigate the impact that translation may have on learning L2 vocabulary. One hundred and ninety-one French students who had enrolled in a TESL (Teaching English as a Second Language) programme participated in the study. Some students translated sentences from their L1 into the L2. Others translated sentences from the L2 into the L1. The remaining students were already provided with the translation of the sentences and they were asked to copy them. A test was administered and the results showed that the three methods were useful for short-term recall, but the students who were exposed to the sentences and copied them outperformed the other students.

The results obtained in Hummel (2010)'s study are quite surprising. They seem to suggest that the mental processes involved in translating words from the L1 into the L2 or vice versa do not have a great impact on retention. Students who were already given the translations outperformed the ones who had to translate the words themselves. However, it may also be the case that copying may bring a greater benefit than the act of translating.

Tonzar and his colleagues (2009) conducted a study to shed light on the effect that two different learning methods and cognate status of words may have on the learners' acquisition of English and German vocabulary. The two learning methods involved were the word-learning method (L2 word presented with its L1 equivalent) and the picture learning method (L2 words presented with their corresponding picture). One hundred and twenty-three nine-year-old and one hundred and six thirteen-year-old Italian learners participated in the study. After being exposed to the different learning methods and to cognate and noncognate words, they sat a test. The results showed that the picture-learning method was more effective and noncognates were more challenging to learn.

Authors do not seem to agree on which learning method is more effective (L2 word-picture or L2 word-L1word) since some claim that translation may be more useful for L2 vocabulary retention than using pictures to present the words

(Lotto & de Groot, 1998, cited in López-Jiménez, 2010). However, this difference in results between the first (Tonzar et al., 2009) and second (Lotto & de Groot, 1998, cited in López-Jiménez, 2010) research may be due to temporal distance or age differences between the participants, among other factors.

Although it is important to take into account the results obtained in both studies, the present study shares more characteristics with Tonzar and his colleagues (2009)'s research than it does with Lotto and de Groot (1998)'s study. Firstly, the former is closer in time to the present study since it dates from the year 2009 whereas the latter from 1998. Secondly, the former's participants are children the same as the participants of this study and the latter's adults. This made Tonzar and his colleagues (2009)'s results more relevant while preparing the present study than those from Lotto and de Groot (1998). For that reason, the information extracted from Tonzar and his colleagues (2009)'s study had an effect on the preparation of materials and on the analysis of results of the present study.

As the results from Tonzar and his colleagues (2009) suggested that visual stimuli was important, the games prepared for the research included many pictures representing the target words to help students retain them. In addition, when analysing which words were easier to learn, it was taken into account whether they were cognate or noncognate. Cognate words are usually easier to learn and therefore special attention was given to noncognates.

## **2.2 Research questions, hypothesis and rationale**

Three research questions were devised prior to conducting the research. Research question two (RQ2) is the main question while question one (RQ1) and question three (RQ3) are subsidiary. These will now be presented as well as a hypothesis and rationale for each of them. The reason behind not beginning with the main research question is that the questions are presented in chronological order, i.e. following the order in which the research was conducted.

- RQ1: *How does the teacher proceed to present and revise the target vocabulary through the translation method? What are her thoughts on vocabulary translation and games?*

I expect the teacher to call out the word and to wait for an answer. If students are not acquainted with some words, I expect her to provide immediately the equivalent in the L1. I surmise that she believes vocabulary games to be useful, but time consuming which explains her use of translation.

It is important to be acquainted with the teacher's methodology and her beliefs on the two different methods (games and translation) to be able to present and revise the vocabulary in the same manner and to learn why this method is used and not others.

- RQ2: *What method (games or translation) is more effective to learn and retain vocabulary?*

I expect vocabulary games which show clear educational goals to prove more effective than vocabulary translation to acquire and retain the target lexis. It is essential to enquire into the effectiveness of different teaching and learning methods to try to improve students' learning of vocabulary. Another aspect that should be considered is the difference between the students' receptive and productive skills. I expect the students to obtain better results in the receptive parts of the tests. This question is important as students may have learnt a word receptively but not yet productively (Thornbury, 2002).

- RQ3: *What is the students' opinion on vocabulary games and vocabulary translation?*

I suspect that the students prefer playing vocabulary games to translating the lexis since the former is more fun, but also perhaps slightly more demanding. Translating the words together is easier as they have to think less for themselves. Qualitative data is necessary to complement the quantitative data obtained. The results may show that one method works better than the other, but it is important to know whether there is a correlation between the results obtained from the tests and the students' opinion. It may be the case that numbers show that one method works better than the other, but students may

prefer to participate in the other method. To sustain the students' interest, it is primordial that they are happy and motivated in class.

### **3. Case study**

#### **3.1 A case study: assessment of two methods to teach and learn vocabulary**

Having presented the research questions together with a hypothesis and rationale for each of them, we will move onto discussing the research in more depth. Firstly, the participants and setting will be presented. Secondly, the methodology followed will be discussed. This will include an explanation of the materials and the procedures followed, a presentation of the data collection instruments used, an analysis of the data obtained and finally a discussion of the results.

##### **3.1.1 Participants and setting**

The research was conducted in a private school that receives public funds in Mallorca. It is a small school so there is only one class per school year level. Twenty-six students aged twelve to thirteen who were therefore in their first year of secondary education participated in the study. Although this study did not take into account the effect of sex on the results obtained, it should be mentioned that the sample includes more or less the same number of girls as boys who all shared a similar language background. Most of them were born in Mallorca or in mainland Spain so their L1 was Catalan or Spanish. All the students could speak and write both languages since both are official in the Balearic Islands and Catalan is the vehicular language of the school. There were no native English speakers.

Most of the students had studied English since they were three and at the time were studying English four hours per week. Although they were not studying any other subject in English, the vast majority of them seemed to have a high level of proficiency in English for their age. However, as diversity is always present in classes, this one was no exception. The different academic levels were all catered for in their regular English classes. Most students used

the coursebook *Mosaic* by Oxford University Press. However, students who had more difficulties used the coursebook *Spectrum* by Oxford University Press which was similar to *Mosaic* but slightly easier. This difference in levels was taken into account when selecting the students who would form the experimental and control groups.

Thirteen students formed the experimental group (taught through vocabulary games) and the other thirteen the control group (taught through vocabulary translation). These groups were formed with the assistance of their regular teacher since it was highly important to ensure that both groups included students with different proficiency levels. Grouping the students who usually obtained the best grades together and vice versa was avoided since the results would not be valid. In order to be fair to all the students, those in the control group were told that as they would not play the vocabulary games, they would instead play grammar games. This would take place after being introduced to the grammar point and the experimental group students would carry out their usual grammar exercises.

The students' regular teacher could also be considered a participant as she was interviewed to obtain qualitative data. She was born in Mallorca and was in her thirties. Her L1 was Catalan but was also proficient in Spanish. She had been teaching in the same school for ten years and was the only English teacher for all the secondary education students. This meant that to a certain extent she could teach the English language using her own preferred methods. She did not need to come to any agreement with other teachers on using a specific teaching method.

### **3.1.2 Method**

#### **3.1.2.1 Material and procedures**

All the material used was shown in advance to the students' regular teacher to ensure that its level of difficulty was appropriate for the students and I was given her approval. Since I was in charge of teaching 'Unit 8: People and Places' during my teacher training period and this study could not disrupt the learning

programme of the students, I had to use the target vocabulary of this unit to conduct the study.

To carry out this study, I had to overcome one particular obstacle. As aforementioned, there was only one class of 1<sup>st</sup> of ESO and therefore this class had to be split into two groups to be able to have an experimental and control group. However, on a daily basis the students were already split into two groups which helped. Half of the class remained in the classroom with the regular teacher the first half hour whereas the other half went with the language assistant. The second half hour the groups swapped over. This was the procedure which should be followed during my teaching period. However, since the students were grouped depending on their proficiency level, I formed two new groups mixing the students who usually performed better with those who presented more difficulties.

In order to ensure that the research was undertaken as planned, I preferred to carry out the classes of both the experimental and control group myself. The swap over system used in the English classes in this school enabled me to play vocabulary games with the first group which remained with me and then carry out vocabulary translation with the second group. Due to time constraints, this research lasted five sessions (half an hour each). It was not possible to devote more time to vocabulary games and vocabulary translation while teaching the unit.

#### **3.1.2.1.1 Target vocabulary**

The target vocabulary (see Annex A) comprised twenty-nine concrete words which belonged to two different semantic fields (landscape places and places in town). The unit contained extra vocabulary which was not included in the research to avoid overloading the students with too many words. This extra vocabulary appeared in the readings and therefore was learnt when encountered throughout the unit. It is important to mention that the words learnt were those which appeared in *Mosaic* since it was the coursebook used by the majority of students. However, all the words that appeared in *Spectrum*

appeared also in *Mosaic* so the students using *Spectrum* learnt their target words plus some extra ones which appeared in *Mosaic*.

The words which formed the semantic field of landscape places were introduced in Session 2 and the ones belonging to places in town in Session 3. As aforementioned in the literature review, there is controversy surrounding the issue of presenting words which belong to the same lexical set together or separate. In line with Ur (1996) who believes that people try to group words depending on their meaning and therefore this should be taken into account when presenting the target vocabulary, I decided to present the words which were semantically related together. The target vocabulary also included cognate words which I would have preferred to exclude from this study. However, since I had to teach all the unit's words, this was not possible.

#### **3.1.2.1.2 Session 1: Pre-test**

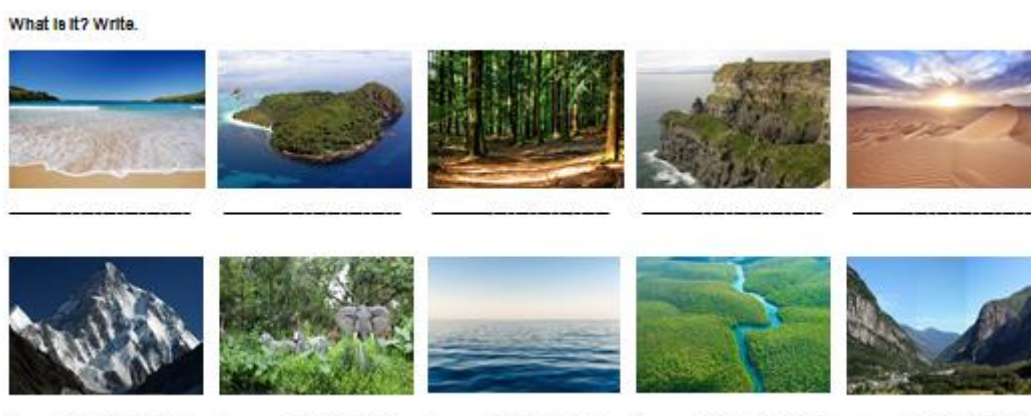
All the students, i.e. those forming the experimental and control groups, were asked to sit a pre-test including the target vocabulary. This test had two main aims. Its first aim was to investigate as to whether the students were already familiar with any of the target words since this would clearly have an effect on the results obtained from this research. To test their prior knowledge, it was considered important to divide the test into two parts, one assessing their receptive knowledge and the other their productive knowledge. This was conducted in this manner to provide the researcher with a deeper understanding of the students' prior knowledge. It may be the case that some students recognise and understand a word (receptive knowledge), but are unable to produce it (productive knowledge) (Thornbury, 2002).

Its second aim was to ascertain whether there was a difference between the experimental and control group in terms of vocabulary knowledge before initiating the actual research. If the results obtained revealed that there was a significant difference between the two group's knowledge, it would be necessary to reorganise them since an initial advantage of one group over the other would compromise the results of the research.

The students were not warned in advance that they would sit a test to avoid increasing their stress level. This pre-test was conducted a month before beginning the actual research in one of their regular English classes. On the day of the test, they were asked if they would like to participate in a study on vocabulary teaching and learning. They all agreed and they were asked to carry out the pre-test. They were given fifteen minutes to complete the test and were told that they should be honest and provide only the words they knew and that they should not copy each other.

The test, as aforementioned, included two parts. The first part tested their productive knowledge and the second one their receptive knowledge. They were asked first to conduct the productive part to minimise guessing as much as possible in this part. If they had been given first the receptive part which includes a box with the target words, they may have tried to guess or take chances in the productive part.

The productive part (see Figure 1) included twenty-nine images representing the twenty-nine target words. Under each of them there was a line where the students were asked to write the corresponding word. It was felt necessary to provide students with images which clearly represented the words which had to be produced to avoid confusion.



**Figure 1: Extract from productive pre-test**

The receptive part (see Figure 2) included a box with the twenty-nine target words followed by a number and the same images included in the productive part. Students were asked to match the word/number to its corresponding image. This matching exercise was chosen as an assessing tool



for three reasons. As mentioned in the literature review, 'matching' seemed to be easier for students than other test techniques (Chou, 2014) and proved to be effective in other studies (Andreu, 2015). In addition, time constraints were also a decisive factor. Students needed to be tested using a non-time consuming exercise. Consequently, 'matching' seemed to be appropriate.

Match each word/number to its corresponding picture.

Ocean (1), desert (2), beach (3), cave (4), cliff (5), coral reef (6), forest (7), island (8), jungle (9), mountain (10), rainforest (11), valley (12), waterfall (13), river (14), bakery (15), bookshop (16), chemist's (17), church (18), cinema (19), department store (20), newsagent's (21), office block (22), petrol station (23), post office (24), shopping centre (25), sports centre (26), sweet shop (27), takeaway (28), train station (29).



Figure 2: Extract from receptive pre-test

### 3.1.2.1.3 Session 2: Introduction of vocabulary (landscape places) through games

The experimental group students were told that they would be introduced to the unit's vocabulary. However, instead of using translation to introduce the new words, these would be introduced while playing games. They were told to avoid translating out loud the vocabulary when encountered in the games. The students were then divided into three groups of three and one of four. The groups were formed with the help of my mentor to ensure that each group contained mixed-ability children. In this way, stronger students could help weaker ones and competition amongst groups would be fair. It would not make sense to group all the strong students together since they would always win and the other groups may consequently give up.

Each group was given fourteen flashcards, each of them containing one of the target words on the right hand side and its corresponding image on the left (see Figure 3). They were told to read the words and look at their corresponding image and to discuss them with their classmates. The researcher

moved around the class and corrected the students if they mispronounced the words.



**Figure 3: Example of one of the flashcards**

When the time was up, they were told to cut the flashcard through the middle in order to detach the word from the image. After having cut all the flashcards, they were told to separate the words from the images and to turn all the words and images upside down. Then, in turns, they had to turn over one of the images or words and search for their counterpart. When the students had put together a pair (word-image), they kept it and were awarded one point. At the end of the game, the student with more points within the group won.

This game involved understanding the words and matching them to their corresponding visual representations. It could be considered a memory game as students apart from understanding and matching, had to make use of their memory to win the game. In this game, the students' receptive word knowledge was enhanced. Exposing the students to the words together with their corresponding image enabled the researcher to introduce the words without resorting to translation. After this game, students were more familiar with the pronunciation and spelling of the words and their meaning which was conveyed through the images.

After becoming acquainted with the words, the students were told that they would play another game which would involve competing against the other groups. They were told that the whole group would come to the front of the class where they would be given an image representing one of the landscape places previously studied. This image could not be shown to the other groups. The group members would have one minute to think of the target word being represented and to think of characteristics pertaining to that particular landscape. One of the group members would then have to try to describe the

landscape using pertinent vocabulary enabling the other groups to guess the word. The first group to guess the word would win and would be awarded a point. The group with more points would win the game.

To help the students, each image came with some characteristics, i.e. clues which included two nouns, two verbs and two adjectives (see Figure 4), but they were advised that they could not only rely on them. They were also informed that all the group members had to be the spokesperson at least once to ensure that everyone was given a chance to participate. In addition, they were instructed to wait until the spokesperson had finished before raising their hand if they knew the word. Whoever raised their hand first could provide the answer. They were reminded of the importance of consulting each other within their group before raising their hand since if wrong, another group would be given the opportunity to give the correct answer.



**Figure 4: Example of image and clues**

This game entailed producing the words, first by the group members who had the image and then by the other groups who had to guess the word being described. The first game, which could be considered less challenging, was necessary for students to become acquainted with the words to be able to play the second game. After this game, students were asked to complete post-test 1 which was identical to the pre-test, but only included the words introduced in this session.

#### **3.1.2.1.4 Session 2 and 3: Introduction of vocabulary (landscape places and places in town) through translation**

Sessions 2 and 3 of the control group will be explained together since the procedure was identical for both of them. However, in session 2, students were introduced to the words belonging to the semantic field of landscape places and in session 3 to the words belonging to the semantic field of places in town. Both

sessions were conducted following the procedure of the students' regular teacher. They were asked to open their workbook at unit 8 vocabulary reference page which included the unit's target vocabulary together with a space alongside each word to fill in its corresponding translation. Students were asked to read the session's target words and write the translation of the words they already knew. They were given five minutes.

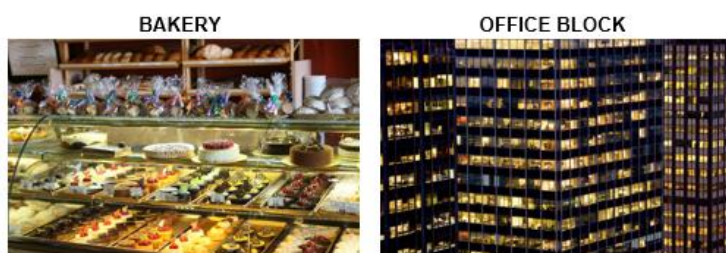
The researcher then stood at the front of the class and asked "who knows what 'x' means" for each of the words. If any students were already acquainted with the word they provided its translation in Catalan and the students who did not know it, wrote it down at the time. If the word was new to the students and no-one answered then the researcher gave them some clues in English until they produced the correct translation. For example, if they did not know the meaning of 'valley' they were told "it is a place in the middle of two mountains". The researcher always tried to use language which matched the students' proficiency level. If this prompting was still not sufficient, the researcher provided the translation.

After having translated all the words, one of the students was asked to read them all out loud together with their translations to ensure that they all had the correct translation and to clarify any doubts that may have arisen. It was important to have the correct translation since the vocabulary exam consisted in translating these words from Catalan into English. Time was purposely put aside to expose the students to the images the experimental group had worked with to ensure that both groups had seen them before conducting the tests. If both groups had not been exposed to the images, the final results could be distorted since these were included in the tests. The researcher raised the flashcards showing the target words and their corresponding images and the students provided the translation. Following session 2, students conducted post-test 1 and following session 3, they carried out post-test 2 each including only the words introduced in each session.

### **3.1.2.1.5 Session 3: Introduction of vocabulary (places in town) through games**

In this third session, students already had an idea of how the session would be conducted. They were told they would be introduced to the words belonging to the semantic field of places in town and they knew that they would be playing games. New groups were formed to play this session's games. Again, each group included stronger and weaker students to encourage cooperation and ensure that no group had any advantage over the others.

The researcher searched for images which represented the target words and made a large flashcard including the image and the word (see Figure 5). These were hung all over the classroom walls. Students were told that they had five minutes to move around the classroom and look at the images. After the time was up, the researcher collected all the images and the students were told to sit with the members of their team. They were asked to try to recall the fifteen places in town observed and list them on a piece of paper. Cooperation amongst the team members was essential to try to remember all the places. When all the teams had written down the words they could recall, the researcher asked for a volunteer from each one to write his/her group's words on the blackboard. They did this simultaneously, but without copying each other. Then the researcher asked each volunteer to read out the words he/she had written and spelling and pronunciation mistakes were addressed. All the words were then erased.



**Figure 5: Example of flashcards hung on walls**

Teams were then given an envelope which contained small images, two of which were related to each place in town (see Figure 6). In total there were thirty images which represented objects which could be found in the different places in town. For example, there was an image of popcorn and one of a big

screen which were clearly related to a cinema. They were asked to write each place in town on a separate piece of paper and to choose the two images related to each place. In the end, they should have on the table the fifteen words (places in town) and next to them the two related images. They were advised that this should be done in silence in order to avoid copying. They were also told to raise their hand when finished and the researcher would check whether they had succeeded. Finally, they were informed that the quickest team in making all the correct connections would win.



**Figure 6: Example of envelope containing small images**

Following the completion of the game, students were asked to carry out post-test 2 which included only the words dealt with in this session.

#### **3.1.2.1.6 Session 4: Revision of target vocabulary with experimental group**

The students were told they would revise the unit's vocabulary through playing a game. They were asked to sit in pairs. Then they were told to recall all the different words they had learnt throughout the unit and to choose one. The researcher made sure that the words chosen were not repeated. Each pair was told to prepare in five minutes a short conversation which clearly described the word selected. For example: S1: Hi Julie, where are you going? S2: Hi, I need to buy summer clothes. S1: Oh, so are you going to a place where there are many shops? The other pairs of students had to deduce that they were describing the word 'shopping centre'. All the words mentioned were written on the blackboard.

The teacher then gave each pair an envelope with small pieces of paper with one letter written on each. They were asked to form as many target words as possible from the letters included in the envelope. On the blackboard, there were only seven words (one word per pair), but as the unit included twenty-nine,

they had to recall all the words they had learnt to be able to form as many as possible using the letters provided in the envelope. The pair of students who formed more words won the game.

#### **3.1.2.1.7 Session 4: Revision of target vocabulary with control group**

The students were told that they would revise the unit's vocabulary. The teacher provided one of the front row students with one of the target words in Catalan and that student had to provide the translation. If he/she did not know the translation of this particular word, the teacher moved on to the next student who had the opportunity to give the correct answer and so on until eventually one student gave the correct translation. This same procedure was followed with the twenty-nine target words.

#### **3.1.2.1.8 Session 5: Delayed test**

The experimental and control group sat a delayed test one month after the post-tests were conducted. The delayed test was identical to the pre-test and was undertaken by both groups under the same circumstances. The students were tested on the twenty-nine target words, both receptively and productively and were given fifteen minutes maximum to complete the test. They were asked to be honest and write only the words they knew to minimise the chance factor.

#### **3.1.2.2. Data collection**

A mixed methods approach was used to collect the relevant data to answer the research questions. Tests were employed to gather quantitative data and classroom observation and interviews to collect qualitative data. It was decided to use different instruments to collect data to be able to compare and contrast the results obtained prior to answering some of the research questions. These tools can be found below together with the reasons for making each choice.

##### **3.1.2.2.1 Tests**

A test was devised to obtain quantitative data to answer RQ2 which was intended to shed light on what method was more effective to learn and retain



vocabulary. The participants took this test various times throughout the research. They sat a pre-test, post-test 1 and post-test 2 and finally a delayed test. These were identical to maximise validity and reliability. The pre-test and delayed test, as aforementioned, assessed the participants' knowledge on all the target words whereas post-test 1 and 2 only tested the words which had been presented in each session. As aforementioned, the conditions under which the experimental and control groups took the tests were identical, i.e. they were awarded the same amount of time for the pre-test and delayed test (fifteen minutes maximum) and slightly less for the post-tests as they were shorter (ten minutes maximum). They were all reminded that their performance in the tests would not count towards their final grade to minimise stress levels.

The pre-test was conducted one month before the actual experiment began in order to assess the students' prior knowledge on the target words and to learn if the experimental and control group had a similar vocabulary level. Following session 2, they were asked to carry out post-test 1 and following session 3, they conducted post-test 2. Post-test 1 and 2 were crucial to find out if the students had learnt the words introduced in each session and also what method had proved more effective. Finally, the delayed test was carried out one month after the students had conducted the post-tests to discern to what extent they had retained the words and again what method had worked better in terms of vocabulary retention.

#### **3.1.2.2.2 Classroom observation**

Classroom observation was undertaken to collect qualitative data and answer the first part of RQ1 which was aimed at investigating the way in which the students' regular teacher presented and revised the target vocabulary using translation. In addition, this tool enabled the researcher to personally observe the students' reactions to this method.

The researcher attended the sessions in which the teacher presented and revised the previous unit's vocabulary (unit 7). These observations were important for the researcher to observe and learn how the teacher proceeded using the translation method. In fact, they were crucial for the development of



this study since the researcher had to present and revise the vocabulary with the control group in the same fashion using the same method as their regular teacher. The researcher did not only focus on the teacher, but also on the reactions of the students.

The researcher sat at the back of the class and took notes on different aspects of the teaching process. Certain aspects which had been thought over by the researcher prior to attending the session were checked while the teacher was conducting the lesson. However, any other aspects thought to be of consequence were also noted. Amongst others, some of the elements focused on were whether the teacher spoke in the students' L1 when conducting the translation exercise, whether she provided the translation immediately or whether the students provided it themselves, whether the students were participating and having fun, etc.

### **3.1.2.2.3 Interviews**

Various interviews were conducted, one with the teacher and a few with students randomly selected from the experimental group. These interviews including a number of questions enabled the researcher to gather qualitative data to answer the remaining research questions. The data obtained was used to answer the second part of RQ1 aimed at eliciting the teacher's opinion on vocabulary games and translation and to answer RQ3 aimed at finding out the students' opinion on these two methods.

The interview with the teacher took place before the games were played to avoid the answers being biased. However, the interview with the students took place after the games were played to obtain the maximum feedback. Although the students had played games to revise the vocabulary before, they had never played games to introduce the vocabulary. For that reason, it was considered that if the interview had taken place before the games, the data obtained would not be as reliable as it would be after being exposed to the games. All the interviews were conducted in the teacher's and student's L1 to create a relaxed atmosphere and extract as much information as possible.

### **3.1.2.3. Data analysis**

#### **3.1.2.3.1 Quantitative data**

Excel and SPSS were employed to analyse the quantitative data. Firstly, after having corrected the pre-test, post-tests and delayed test, the results of both the experimental and control groups were entered into Excel to obtain a general overview of the results. The results from the receptive and productive parts were kept separate.

Secondly, the data was entered into SPSS to carry out a more in-depth analysis. SPSS enabled the researcher to examine the data visually prior to initiating the actual analysis. Boxplots, i.e. a tool which supplies the researcher with “information about group centers, spread, and shape of a distribution” (Larson-Hall, 2010: p. 245), were created. This tool also helped to spot outliers, i.e. “points which distort group means, especially in groups with small sizes” (Larson-Hall, 2010: p. 245). All the information extracted from the boxplots was taken into account, e.g. if outliers had been found in the data, they would have been excluded from the analysis. However, groups were rather homogeneous.

Thirdly, descriptive statistics were generated. Finally, independent-samples *t*-tests were conducted to learn whether the difference between the means of the experimental and control group was statistically significant. Paired-samples *t*-tests were also carried out to investigate whether the difference in means from one test to another conducted by the same pupils was statistically significant. The *p* value (significance level) was set at .05. In order to be able to claim that the difference was statistically significant, the *p* value had to be smaller than .05.

#### **3.1.2.3.2 Qualitative data**

The qualitative data obtained from classroom observations and interviews with the students’ regular teacher and the students themselves was compared and contrasted to ensure consistency. For example, when the students were asked what method they enjoyed the most, they may have responded depending on whether it was the teacher or the researcher asking the question. They may be

seeking their teacher's approval or the researcher's, something natural to children (Harmer, 2007), which may have distorted the results. Consequently, this information was analysed in conjunction with classroom observations.

### **3.1.3 Results and discussion**

The quantitative and qualitative data gathered throughout the research will now be presented, analysed and discussed. This will be conducted while answering the three research questions stated at the beginning of this paper.

#### **3.1.3.1 Results for research question one**

Research question one was aimed at learning how the teacher proceeded to present and revise the target vocabulary through translation and her opinion on vocabulary translation and games. This research question will be answered by resorting to the qualitative data gathered throughout the research. The first part of the question will be answered employing the data collected from classroom observations whereas the second part will be answered by making use of the information extracted from the teacher's interview.

Prior to becoming the teacher of the experimental and control group, it was necessary to become familiarised with the methodology used by the students' regular teacher since the same procedure would have to be followed when teaching the control group students. Consequently, during the observation period of my teacher training, I observed and took notes of the manner in which the vocabulary was presented and revised through translation. On a regular basis, the teacher asked the students to open their workbook and go to a section called 'vocabulary reference' which included a list with the unit's vocabulary. They were given five minutes to read and translate any words already known. Next, from the front of the class, the teacher read each word out loud and the students had to provide the translation. The teacher prompted the students by providing a description of the word in English to help them to guess any unknown words. When they felt they knew the word they called it out in their first language. If they still did not know the meaning of the word, the teacher herself provided the translation. One student was then asked to read

out all the words with their equivalents in Catalan and the teacher enquired if there were any doubts. I observed that it was always the same students participating (the stronger students), some others were just writing down the translations and a few were struggling to keep up with the rest of the class. They were aware that it was important to have all the words translated correctly since these words and their translation would inevitably appear in their vocabulary exam.

As to revising the vocabulary through translation, I observed the following activity being conducted: the teacher provided one of the students sitting in the front row with one of the target words in Catalan and he/she had to give the English equivalent. If he/she did not know it, the person sitting next to this student had to provide the translation and so on until finally one of the students could give the correct answer. This same procedure was followed with all the unit's target words. This exercise was conducted mainly to revise for the vocabulary exam. The students who had studied the vocabulary seemed to enjoy this activity as they could demonstrate how much they knew. However, those who had not studied enough seemed to feel slightly anxious when it came to their turn.

Regarding the teacher's interview, it took place before the research began. It was an informal interview during which she was asked about her views on teaching and learning vocabulary through games and translation. She was asked the following questions:

- What are your views on vocabulary games? Do you like them? Do you play them in class and when?
- What do you think about vocabulary translation? Why do you use this method to introduce and revise vocabulary? Do you think it works?

When I enquired into her views on vocabulary games, her answer was that she thought it was an effective method and explained that the students occasionally played games which included vocabulary related to different topics with the language assistant. She did not make any other comments regarding games.

The second question, i.e. her opinion on vocabulary translation and the reason for using this method, however, provoked more discussion. She

explained that she liked to introduce the unit's vocabulary using translation as in this way she hoped to ensure that every student was familiar with the meaning of the target words. She explained that she believed that this method worked well for the weaker students who were not always able to follow the class. In addition, she explained that they did not move on to grammar until the students had a passable command of the unit's vocabulary and, consequently, this translation activity had to take place at the beginning of the unit. When all the vocabulary had been translated into the students' first language, they would soon after sit the vocabulary exam to ensure that all the students were acquainted with the target lexis. She seemed to suggest that this method was more accessible to everyone irrespective of their level of proficiency.

### **3.1.3.2 Discussion research question one**

The fact that the teacher did not make many comments about vocabulary games, made me suspect that they were not used that often, especially made up games which had been specially devised to address the vocabulary in the curriculum or even existing games which had been adapted to learn the unit's vocabulary. During the time spent at this school, the only game the students played was one called 'say the word' and they did not seem overly enthusiastic about playing it. This again highlights the controversy surrounding the fact that many teachers admit their enthusiasm for playing games, but they do not seem to treat them as a core element of their methodology. The potential of games may not be exploited enough.

The teacher relayed some important ideas when discussing the translation method. She pointed out that this method enabled all the students to participate. This same idea was mentioned by Marqués-Aguado and Solís-Becerra (2013). However, as aforementioned, most of the students participating were the stronger ones. It is true that some of the weaker students also participated, but it was difficult to discern whether they were producing the correct translation since they were all shouting out the words at once. Being able to hear the weaker students would be positive since if they produced the

correct answer, the teacher would be able to congratulate him/her and this positive reinforcement would boost their motivation.

It is true that translation may have many advantages as explained in the literature review. One of the advantages that I observed, which was already suggested by Vermes (2010, cited in Marqués-Aguado and Solís-Becerra, 2013), was that the weaker students seemed more relaxed while translating the words at the beginning of the unit since they could use their first language. However, Koletnik (2012) puts forward that translation is a natural phenomenon when learning new vocabulary. Consequently, if students will automatically begin translating the words when presented in class, the time used to translate the words out loud could be devoted to other activities. Nevertheless, students may face the problem of not knowing the translation of some words if not translated all together in class. However, they could be asked to translate the unknown words at home with the aid of a dictionary.

In fact, having had access to the results obtained in the students' vocabulary exam which, as aforementioned, consisted in translating words from Catalan into English, I found that the experimental group obtained similar results to the control group. This was surprising since the experimental group students had not been exposed to translation. However, they were told to translate the words at home and to ask any doubts the next day in class. The results achieved reinforce my idea that translation can be conducted at home and class time can be used for other activities such as games.

### **3.1.3.3 Results for research question two**

Research question two was aimed at discerning what method (games or translation) was more effective to learn and retain vocabulary. Special attention was given to the students' receptive and productive word knowledge. This question will be answered by resorting to the quantitative data obtained from the pre-test, post-test 1 and 2, the results of which have been combined to facilitate understanding, and delayed test taken one month later. All the participants sat the same 29-item pre-test and delayed test and 14/15-item post-tests. The words were tested both receptively and productively, but the results, as

aforementioned, were kept separate. If these had been kept together, the results would be distorted as the same word if known receptively and productively would be counted twice (see Figure 7 and 8).

Figure 7 and 8 show how both the experimental and control groups improved greatly from the pre-test to the post-tests in terms of both receptive and productive word knowledge. From the post-tests to the delayed test, experimental group students' receptive word knowledge declined whereas the delayed test results of the control group were identical to the ones obtained in the post-tests. As to their productive knowledge, both groups improved from the post-tests to the delayed test. It should be highlighted that the experimental group surpassed the control group in the post-tests and delayed test and that both groups did better in the receptive part of all the tests than in the productive part.

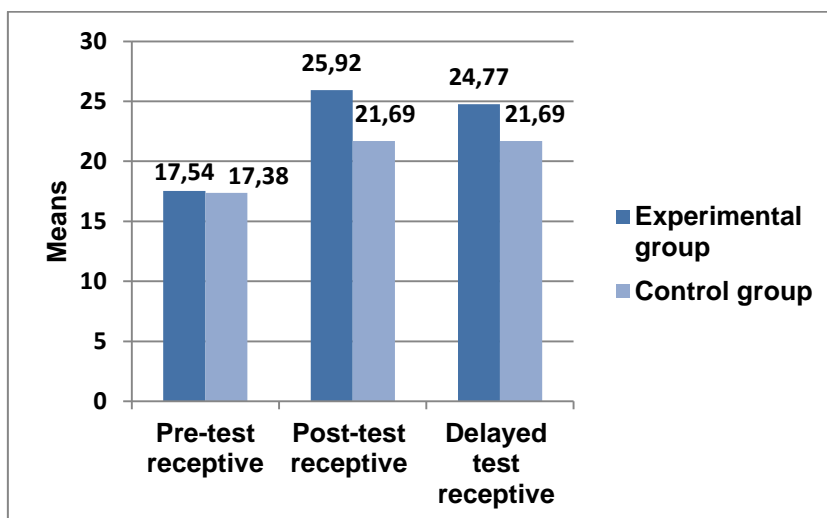
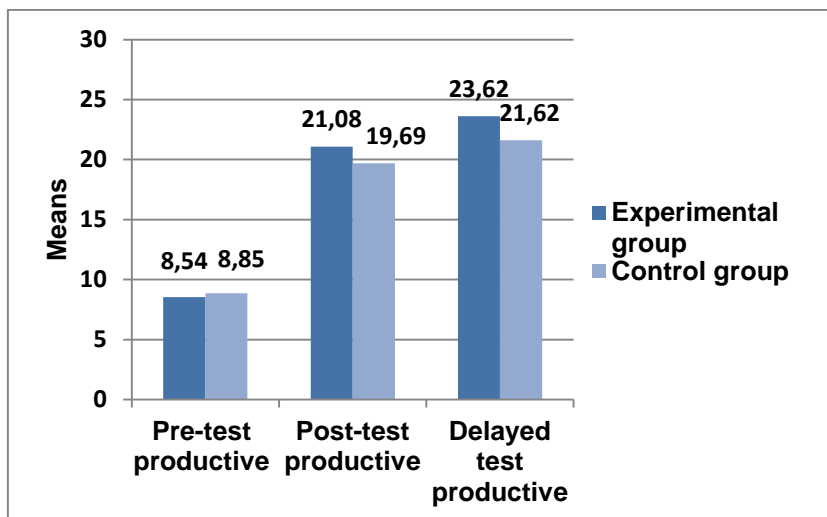


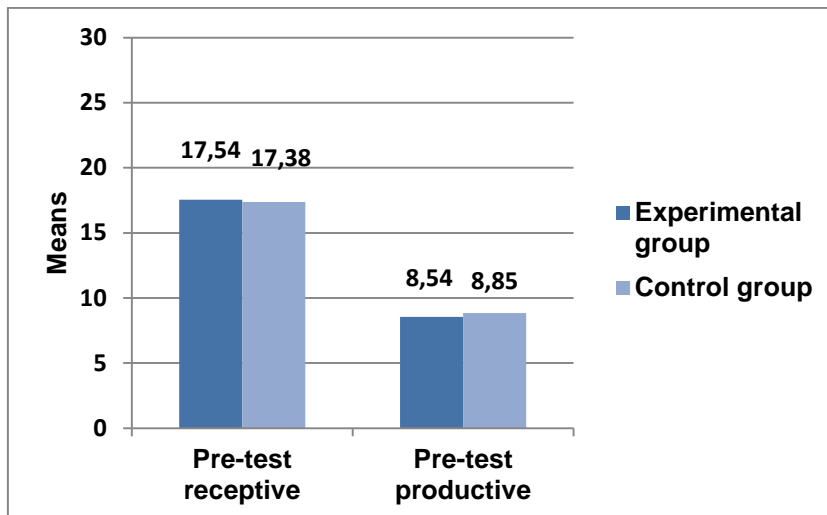
Figure 7: Overview of receptive test results



**Figure 8: Overview of productive test results**

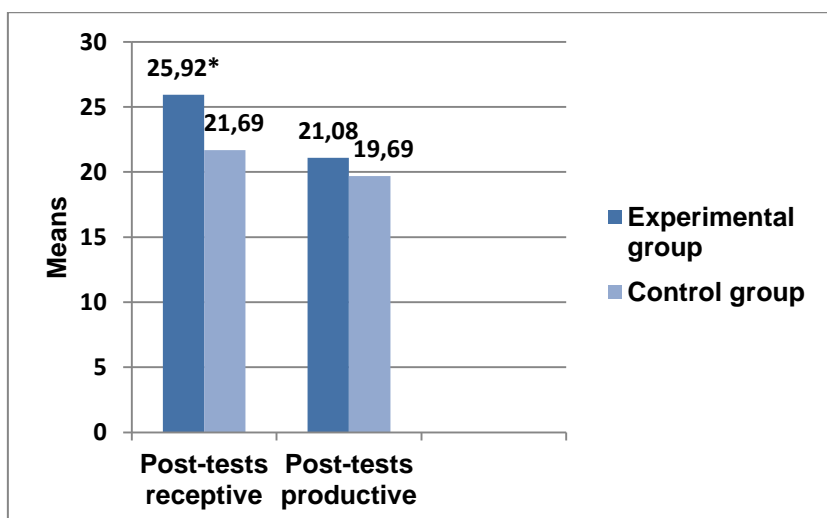
The different tests will now be examined in more detail. Prior to exposing the students to vocabulary games or vocabulary translation, they were asked to sit a pre-test to ensure that both groups had more or less equal vocabulary knowledge from the beginning. The results showed that the experimental and control group had similar receptive and productive vocabulary knowledge before initiating the experiment (see Figure 9): experimental group (receptive:  $M = 17.54$ ,  $SD = 7.14$ ; productive:  $M = 8.54$ ,  $SD = 3.77$ ) and control group (receptive:  $M = 17.38$ ,  $SD = 4.44$ ; productive:  $M = 8.85$ ,  $SD = 2.26$ ). To learn whether the difference was statistically significant, two independent-samples  $t$ -test were carried out. The first one comparing the receptive pre-tests of both groups which revealed that the difference was not statistically significant [ $t(24) = .066$ ;  $p > .05$ ] (see Annex E). The second one comparing their productive pre-tests which also showed that the difference was not statistically significant [ $t(24) = -.252$ ;  $p > .05$ ] (see Annex E).





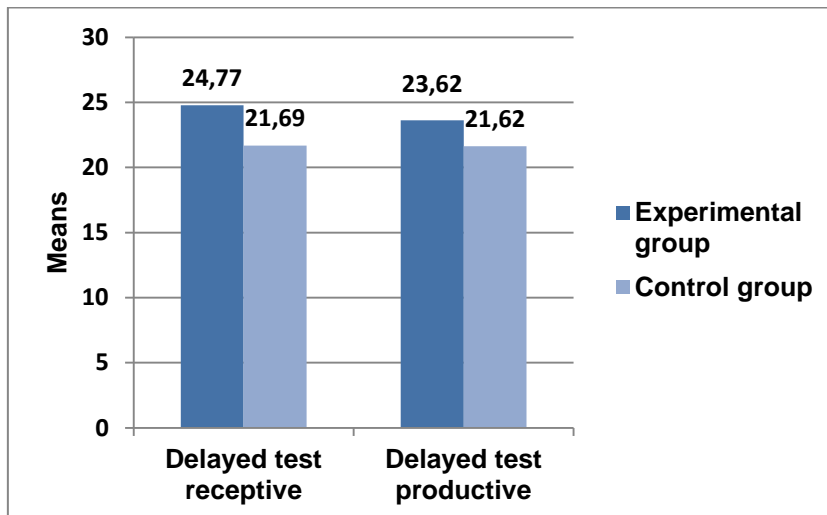
**Figure 9: Pre-test receptive and productive experimental and control groups**

As to the post-tests (1 and 2), the experimental group also obtained better results than the control group in both the receptive and productive parts (see Figure 10): experimental group (receptive:  $M = 25.92$ ,  $SD = 2.98$ ; productive:  $M = 21.08$ ,  $SD = 4.36$ ) and control group (receptive:  $M = 21.69$ ,  $SD = 4.07$ ; productive:  $M = 19.69$ ,  $SD = 4.90$ ). The difference did not seem to be very great and could be due to chance. Consequently, two independent samples  $t$ -tests were conducted to detect whether the difference was statistically significant. The  $t$ -test comparing the receptive results revealed that the difference was statistically significant [ $t(24) = 3.02$ ;  $p < .05$ ] (see Annex E). However, the  $t$ -test comparing the productive results confirmed that the difference was not statistically significant [ $t(24) = .76$ ;  $p > .05$ ] (see Annex E).



**Figure 10: Post-tests productive and receptive experimental and control groups**

Regarding the delayed test, descriptive statistics revealed that the experimental group again did better than the control group in both the receptive and productive parts (see Figure 11): experimental group (receptive:  $M = 24.77$ ,  $SD = 4.08$ ; productive:  $M = 23.62$ ,  $SD = 3.90$ ) and control group (receptive:  $M = 21.69$ ,  $SD = 4.78$ ; productive:  $M = 21.62$ ,  $SD = 4.80$ ). Two independent-samples  $t$ -tests were conducted to conclude whether the difference between the receptive results of the experimental and control group were statistically significant and the same was carried out with the productive results. The  $t$ -test comparing the receptive results of the experimental and control groups revealed that the difference was not statistically significant [ $t(24) = 1.76$ ;  $p > .05$ ] (see Annex E). The  $t$ -test comparing the productive results also revealed that the difference was not statistically significant [ $t(24) = 1.16$ ;  $p > .05$ ] (see Annex E).



**Figure 11: Delayed test receptive and productive experimental and control groups**

In order to answer the second part of research question two, i.e. what method is more effective to retain vocabulary, the post-tests and delayed test were compared to learn whether some words were forgotten in the time lapse of a month. The receptive word knowledge of the experimental group slightly declined from the post-tests to the delayed test (post-tests:  $M = 25.92$ ,  $SD = 2.98$ ; delayed test:  $M = 24.77$ ,  $SD = 4.08$ ) which means that the students may have forgotten some words (see Figure 12). A paired-samples  $t$ -test was conducted to find out whether the difference was statistically significant, but it was not [ $t(12) = 1.01$ ;  $p > .05$ ] (see Annex E). Their productive word knowledge improved from the post-tests to the delayed test (post-tests:  $M = 21.08$ ,  $SD =$

4.36; delayed test:  $M = 23.62$ ,  $SD = 3.90$ ) (see Figure 12). However, a paired-samples  $t$ -test concluded that the difference was not statistically significant [ $t(12) = -1.90$ ;  $p > .05$ ] (see Annex E).

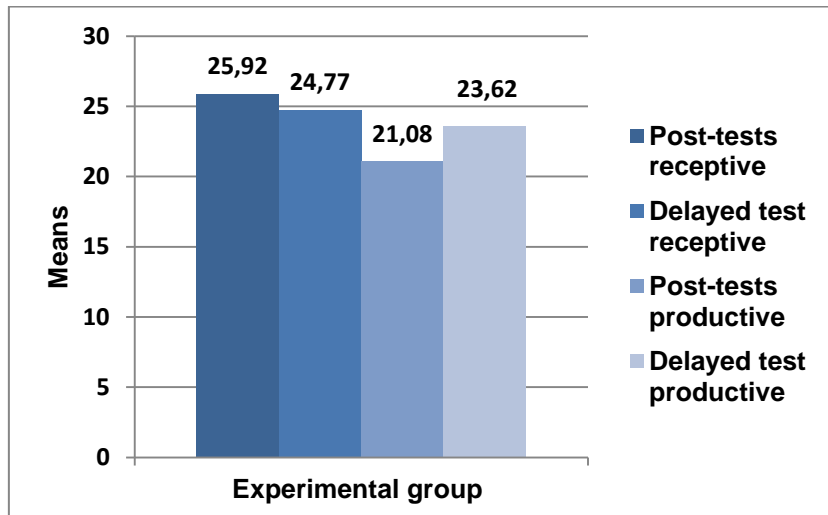


Figure 12: Receptive and productive post-tests and delayed test experimental group

Regarding the control group, surprisingly, their receptive word knowledge has remained the same from the post-tests to the delayed test ( $M = 21.69$ ) which means that the students did not gain nor forget any words. However, their productive word knowledge increased from the post-tests to the delayed test (post-tests:  $M = 19.69$ ,  $SD = 4.90$ ; delayed test:  $M = 21.62$ ,  $SD = 4.80$ ) (see Figure 13). Nevertheless, a paired-samples  $t$ -test revealed that the difference was not statistically significant [ $t(12) = -1.61$ ;  $p > .05$ ] (see Annex E).

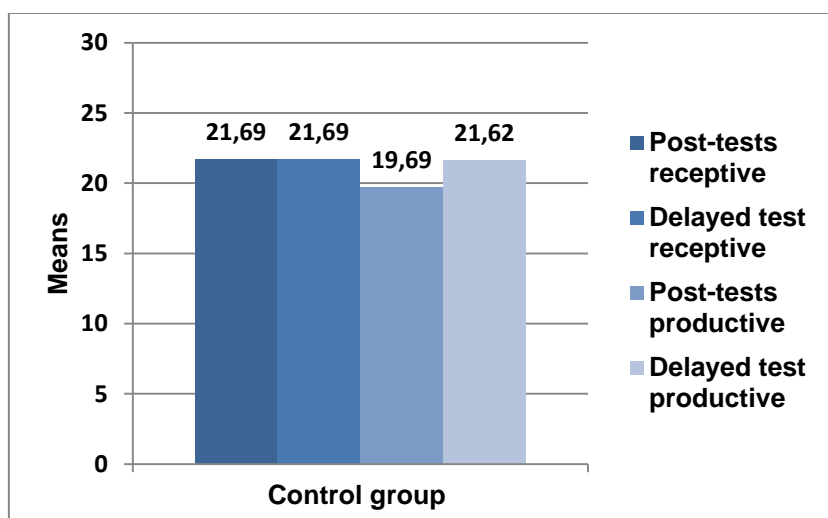


Figure 13: Receptive and productive post-tests and delayed test control group

### 3.1.3.4 Discussion research question two

Prior to discussing the aforementioned results, it is important to address a few issues which are crucial to understanding the data analysis. The students were exposed to the 29 target words through two different methods (games or translation). Some were cognates in English and Catalan, among others, 'jungle' (jungla), 'desert' (*desert*), 'ocean' (*oceà*) and therefore could have been excluded from the data analysis since they are easier to learn (Thornbury, 2002). However, the results obtained in the pre-test were a decisive factor in the decision not to exclude cognate words from the analysis since although some students knew these receptively, they did not know them productively.

The receptive and productive distinction has clearly marked the data analysis of the present research. This distinction was considered to be important since, as aforementioned, some students knew a word receptively, but not productively. Students usually learn first the word receptively and then productively. In addition, it is said that the students' receptive word knowledge is larger than their productive one (Thornbury, 2002). This statement can be supported by the present study's test results which show that the participants always did better in the receptive part.

Both groups improved from the pre-test to the post-tests, but the experimental group surpassed the control group in all the tests. The experimental group obtained impressive results in the receptive post-tests. The difference between these and the results obtained by the control group was statistically significant. This suggests that games were an effective method to enhance the students' receptive word knowledge. However, the mean obtained in this test declined in the delayed test. We can deduce therefore that games proved effective to improve students' receptive word knowledge and enabled the students to remember the words immediately after, but some were forgotten after a month. Games helped students to memorise words and retain them in the short term store, but they were not effective enough to enable the words to enter the long term store. Nevertheless, the difference between the mean of the receptive post-tests and the receptive delayed test was not statistically significant so it could have been due to chance.

In addition, the experimental group experienced an increase in its productive knowledge from the post-tests to the delayed test. This seems to suggest that students needed time to learn words productively. They encountered the target words several times throughout the unit after having played the games and revised the vocabulary using games which may have helped the students improve their productive word knowledge.

Surprisingly, the control group obtained the same results in the receptive post-tests and delayed test. This suggests that compared to games, the translation method may not be as effective to immediately enhance students' receptive knowledge, but translation may be more productive than games to retain words as the students did not seem to forget what they had learnt. Again the control group students improved their productive word knowledge from the post-tests to the delayed test.

It is true that some *t*-tests revealed that the difference between the results obtained in some tests from the experimental and control groups, such as the delayed test, was not statistically significant, but the results of the experimental group are still promising. As Larson-Hall (2010: p. 55) states "just because we cannot reject the null hypothesis does not mean, however, that we must accept it (in other words, we do not have to conclude that our treatment had no effect)." It must be noted that the students only played games during a few sessions due to time constraints. Consequently, the time factor may have hindered the experimental group students from obtaining better results.

In addition, the experimental group students were not used to playing games to introduce and revise vocabulary. They were over-excited and this may have provoked a loss of concentration while storing the words which according to Hedge (2000) can cause rapid forgetfulness. As aforementioned, some principles need to occur to avoid words being forgotten "repetition, retrieval, spacing, pacing, use, cognitive depth, personal organising, imaging, mnemonics, motivation, attention and affective depth" (Thornbury, 2002: pp. 24-26). This study only focused on the learning of the target words. However, the experimental group when playing games were exposed to other lexis which, in some cases, was new to them. For example, the games played in session 3

included words such as scale, rail, changing room, etc. These extra words may have also been learnt, probably receptively rather than productively. Consequently, games may be useful to expose students to words which do not appear in their coursebook. However, investigating whether they have learnt extra vocabulary while playing games goes beyond the scope of this study.

All in all, it must be acknowledged that games had a positive impact on students' vocabulary learning since the experimental group obtained better results than the control group in all the tests. However, the difference was not large enough to conclude that vocabulary games are more effective than vocabulary translation to learn and retain words. My initial hypothesis (games will prove more effective to learn and retain vocabulary) cannot therefore be entirely confirmed.

### **3.1.3.5 Results for research question three**

Research question three was aimed at learning the students' opinion on vocabulary games and vocabulary translation. This question will be answered by resorting to the qualitative data gathered from the students' interviews. Following the completion of the sessions devoted to vocabulary games and vocabulary translation, some experimental group students were randomly selected to answer a few questions. These interviews were conducted by the researcher. However, it was felt that the number of interviews carried out was not sufficient to provide a clear picture. Once again this was due to time constraints. As time was limited and the students could not take time out of class to be interviewed, their regular teacher, who was back in charge, was asked to interview a few more students to try to obtain more information to be able to generalise the results. They were asked the following questions:

- What do you think about the games we have played in the last few sessions? Did you like them? Did you have fun?
- Do you like playing games to learn vocabulary? Why/ why not? Or do you prefer translating the vocabulary? Why/ why not?
- What method (games or translation) helps you to learn and retain better the target words?

These questions were formulated in a relaxed and comfortable atmosphere and in the students' first language to be able to extract as much information as possible. The information obtained by the students' teacher and the researcher differed in some aspects. The first question which asked the students' opinion on the games played in class was quite straightforward, without any hesitation or doubt they all answered that they had enjoyed playing the games. Most students mentioned that they had liked the fact that most games included images instead of only words. This question did not incite much discussion and therefore the students were asked the second question.

The second question, i.e. what method the students preferred (games or translation), sparked more debate which enabled the researcher to learn more about the students' preferences and their reasons. All the students agreed that they liked playing games, but when asked what method they preferred their answers differed depending on whether it was their regular teacher or the researcher who had asked the question. Their regular teacher and the researcher were given opposite opinions. When the interviewer was the researcher, the students stated that they preferred playing games rather than translating to learn vocabulary as games were more dynamic and fun. However, the students interviewed by the teacher, opted for the translation method claiming that when translating, they were all able to participate and that it was easier for them as they could use their L1. The data obtained from class observation does support this claim to a certain extent. Although there was student participation it always tended to be the same students who participated.

The third question, i.e. what method the students thought had helped them to retain the target words better, was answered in line with the response provided in question two. Those who showed their preference for games stated that games helped them to retain words better and those who voted for translation explained that translating the words into their first language aided them in remembering the words. There was a clear correlation between the answers from question two and three.

### **3.1.3.6 Discussion research question three**

The data obtained from the interviews can be discussed together with the quantitative data obtained from the tests and the qualitative data gathered from classroom observations. It cannot be denied that the students enjoyed playing games since they themselves admitted that they had had fun and the observations of the researcher also showed that they were all participating, enjoying themselves and it was a fun experience. The researcher paid special attention to those students who had more difficulties and those who although able, as explained at the beginning of this paper, did not seem very interested. The students who had more difficulties were helped by the other members of the group and became active participants during the games. The other students, who were not usually motivated, seemed to be involved and interested while playing the games. Various students commented positively on the amount of images encountered in the games. These were included as many authors have claimed the benefits of visual stimuli (Tonzar et al., 2009).

It is difficult to conclude whether the students actually prefer games or prefer translation since they told the researcher that they preferred games and told their regular teacher that they preferred translation. As aforementioned, students tend to seek for approval (Harmer, 2007) and therefore it is challenging to discern whether they were trying to seek approval or whether they were being honest. However, it could also be the case that the students were in fact being honest and some preferred games, but others translation since there may be many different learning styles in the same classroom.

After having analysed the answers provided in this question, it should be mentioned that the best option to learn the students' opinion on games and translation would have been to create a questionnaire to be filled in anonymously. The interviews may have put the students in an awkward position and they may have not been as honest as desired. However, due to time constraints, the researcher was unable by then to administer a questionnaire to all the students in the experimental group.

Regarding what method helped the students to learn and retain the words more effectively, some students mentioned games and others translation.



However, the experimental group's test results were higher than those obtained by the control group. This means that games must have had a greater positive impact on their vocabulary learning process than translation on the control group students. It would be interesting at this point to expose the students who were in the experimental group to translation and those who were in the control group to games. They could be taught words of similar difficulty to the ones in this study, sit the same type of tests which they completed in this research and then analyse what method worked better for each student. This would help to ascertain whether their beliefs on the method that worked better for them matched their actual performance.

All in all, quantitative data (tests) or qualitative data (observations and interviews) on their own are not enough to decide which method the teacher should use. It may be the case that a method obtains impressive test results, but if the students are not participating and having fun, they may not be motivated into learning vocabulary in the near future. The opposite may also occur. Students may have fun using a specific method, but test results may show that they are not learning enough. Consequently, both quantitative and qualitative data should be taken into account before making a decision.

## **4. Conclusion**

### **4.1 Brief summary of results**

As to research question one, I expected the teacher to call the word out loud and the students to provide the equivalent in their first language and this was how she proceeded. I thought that she would believe games to be useful, but time consuming and I expected her to say that this was the reason for using translation. However, this was not the case. She explained that she used translation because she found that this method was accessible to all the students, whether they had a high or low proficiency level.

Regarding research question two, my hypothesis was that vocabulary games would prove more effective than vocabulary translation to learn and retain the target vocabulary. The quantitative data obtained from the tests revealed that the experimental group obtained better results than the control

group in all the tests. The experimental group students obtained impressive results in the receptive post-tests and the difference between those results and the ones obtained by the control group was statistically significant. We can conclude therefore that games help to enhance students' receptive word knowledge. However, some words were forgotten in their delayed test which suggests that perhaps more revision should have taken place. The results obtained by the experimental group could have been better if time had not been so short. Nevertheless, the translation method cannot be said to be ineffective as the students in the control group also improved from the pre-test to the post-tests and from the post-tests to the delayed test. Translation seemed to be more effective in helping the students to retain the words since not many were forgotten from the post-tests to the delayed test.

As to research question three, I suspected that the students would prefer games to translation as games are more fun, but may be more demanding than translation. After having interviewed the students and having observed their reaction while playing games and while translating the words, whether they prefer games or translation remains inconclusive. Some students stated that they preferred games to learn vocabulary and others translation. From observing the students while playing games and translating, the researcher can claim that the experimental group students appeared to be having more fun and seemed to have learnt more vocabulary than the control group students. However, some of the experimental group students expressed that they thought they learnt and retained more lexis while translating. Having encountered all these opposing opinions, the researcher realises that it would have been useful to administer an anonymous questionnaire instead of conducting interviews. However, this was then impossible due to time constraints.

## **4.2 Pedagogical implications**

The quantitative data collected suggests that games are an effective method to learn and retain vocabulary, especially to enhance students' receptive knowledge. Qualitative data gathered from classroom observation can be used to claim that games, especially cooperative games, are an effective method to

help weaker students to learn and retain the target vocabulary. In addition, games also help to motivate those students who are not interested in learning vocabulary. This does not mean that translation should not be used in class as it has also proved to be an effective method to learn and retain vocabulary. However, students need some variation in class to sustain their interest and motivation. This could be accomplished by incorporating games more often in their lessons. This is not to say either that they should always play games since students may over time become bored. The teacher must find a balance between the different methods used. It should not be forgotten that classrooms include students with different learning styles. Consequently, it is important to use different methods to cater for all the students' needs.

#### **4.3 Limitations and strengths**

The main limitation of this study has been the time factor. As aforementioned, the students in the experimental group may have obtained even higher results if they could have been exposed to games during a longer period of time. In addition, some mistakes made could have been corrected with more time, such as administering a questionnaire to learn the students' opinion on games and translation. Another limitation might be that it is a small scale study, but I believe that the findings can still be generalised to similar contexts. Among the strengths, I could mention that I have been able to carry out all the research myself and therefore all the tests, for example, were conducted under the same circumstances. In addition, I have been able to observe personally the problems that the students had and to learn how their regular teacher proceeded with the introduction and revision of vocabulary which was a key element to be able to conduct the control group classes.

#### **4.4 Future research**

Any other researchers interested in different methods used to teach and learn vocabulary could conduct this study again using my material. However, I would suggest carrying this out over a much longer period of time and perhaps with a larger number of participants to investigate further the potential of games and

also translation which has also proved to be an effective method. However, instead of conducting interviews to enquire into the students' opinion on games and translation, they should administer an anonymous questionnaire. The researcher could also conduct an "item analysis" to learn what words have been easier to learn and try to investigate the reasons. Finally, it would also be interesting, as aforementioned, to expose a group of students to one method and then to the other and compare the results. This would enable the researcher to find out which method works better for each student. In a larger school, which would allow more groups to be formed, it may be beneficial to expose the students to different vocabulary teaching methods over a period of time. Groups of students could then be formed accordingly after detecting which method worked better for each individual student.

#### **4.5 Conclusion**

Based on the findings of the present study which has proved playing games in the EFL classroom to be effective to learn and retain vocabulary, games should be given a higher status in the curriculum. They must be considered to be effective educational tools rather than mere time fillers. The translation method has also generated good results and therefore does not warrant the amount of negative criticism it has received and is still receiving.

## 5. References

- Alemi, M. (2010). Educational games as a vehicle to teaching vocabulary. *The Modern Journal of Applied Linguistics*, 2(6), 425-438.
- Al Neyadi, O. (2007). The effects of using games to reinforce vocabulary learning. In Gallagher, K. & Bashir-Ali, K. (Eds.), *Action Research and Initial Teacher Education in the UAE* (pp. 99-107). UAE: HCT Press.
- Alroe, M. J. & Reinders, H. (2015). The role of translation in vocabulary acquisition: A replication study. *Eurasian Journal of Applied Linguistics*, 1, 39-58.
- Andreu, L. (2015). *The effect of games on primary school pupils' vocabulary acquisition: A Majorcan case study* (Unpublished master's thesis). University of Stirling, Stirling, UK.
- Chou, M. (2014). Assessing English vocabulary and enhancing young English as a Foreign Language (EFL) learners' motivation through games, songs, and stories. *Education*, 42 (3), 284-297.
- Cook, G. (2011). Translation in language teaching and learning [English Language Teaching Global Blog]. Retrieved from <https://oupeltglobalblog.com/2011/10/20/translation-in-language-teaching-and-learning/>
- Dörnyei, Z. (2001). *Motivational Strategies in the Language Classroom*. New York: Cambridge University Press.
- Fernández-Guerra, A. (2014). The usefulness of translation in foreign language learning: Students' attitudes. *International Journal of English Language & Translation Studies*, 2 (1), 153-170.
- Gaudart, H. (1999). Games as teaching tools for teaching English to speakers of other languages, *Simulation and Gaming*, 30 (3), 283-291.
- Hadfield, J. (1998). *Elementary Vocabulary Games. A Collection of Vocabulary Games and Activities for Elementary Students of English*. Harlow: Longman.
- Harmer, J. (2007). *The Practice of English Language Teaching*. London: Longman.

- Hedge, T. (2000). *Teaching and Learning in the Language Classroom*. Oxford: Oxford University Press.
- Hummel, K. M. (2010). Translation and short-term L2 vocabulary retention: Hindrance or help? *Language Teaching Research*, 14 (1), 61-74.
- Koletnik, M. (2012). Expanding vocabulary through translation – An eclectic approach. *Scripta Manent*, 7 (1), 2-12.
- Larson-Hall, J. (2010). *A Guide to Doing Statistics in Second Language Research Using SPSS*. New York: Routledge.
- Lewis, G. & Bedson, G. (1999). *Games for Children*. Oxford: Oxford University Press.
- Lewis, M. (1993). *The Lexical Approach: The State of ELT and a Way Forward*. Hove: Language Teaching Publications.
- López-Jiménez, M. D. (2010). The treatment of lexical aspects in commercial textbooks for L2 teaching and learning. In Chacón-Beltrán, R., Abello-Contesse and Torreblanca-López, M. del M. (Eds.), *Insights into Non-native Vocabulary Teaching and Learning* (pp. 156-175). Bristol: Multilingual Matters.
- Marqués-Aguado, T. & Solís-Becerra, J. (2013). An overview of translation in language teaching methods: Implications for EFL in secondary education in the region of Murcia. *Revista de Lingüística y Lenguas Aplicadas*, 8, 38-48.
- McArthur, T. (2005). *Oxford Concise Companion to the English Language*. New York: Oxford University Press.
- Mehregan, M. (2014). Game-based tasks for foreign language instruction: Perspectives on young learners' vocabulary acquisition. *The IAFOR Journal of Language Learning*, 1 (1), 1-12.
- Nation, I.S.P. (2013). *Learning Vocabulary in Another Language*. New York: Cambridge University Press.
- Nunan, D. (1999). *Second Language Teaching and Learning*. Boston: Heinle.
- Papathanasiou, E. (2009). An investigation of two ways of presenting vocabulary. *ELT Journal*, 63 (4), 313-322.

- Rixon, S. (1996). *How to Use Games in Language Teaching*. Hemel Hempstead: Phoenix ELT.
- Rohani, M. & Pourgharib, B. (2013). The effect of games on learning vocabulary. *International Research Journal of Applied and Basic Sciences*, 4 (11), 3540-3543.
- Scrivener, J. (2011). *Learning Teaching: The Essential Guide to English Language Teaching*. Oxford: Macmillan.
- Thornbury, S. (2002). *How to Teach Vocabulary*. Harlow: Longman.
- Tonzar, C., Lotto, L. & Job, R. (2009). L2 vocabulary acquisition in children: Effects of learning method and cognate status. *Language Learning*, 59 (3), 623-646.
- Toth, M. (1995). *Children's Games*. Oxford: Macmillan.
- Ur, P. (1996). *A Course in English Language Teaching, Practice and Theory*. Cambridge: Cambridge University Press.
- Wood, E. & Attfield, J. (2005). *Play, Learning and the Early Childhood Curriculum*. London: SAGE.
- Wright, A., Betteridge, D. & Buckby, M. (2006). *Games for Language Learning*. Cambridge: Cambridge University Press.

## 6. Annexes

### Annex A: Target vocabulary





## Annex B: Tests

Name and surnames =

1) What is it? Write.





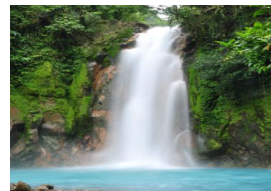
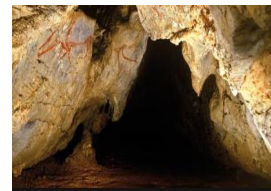
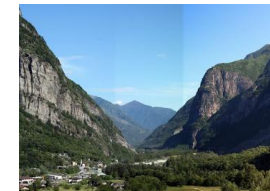


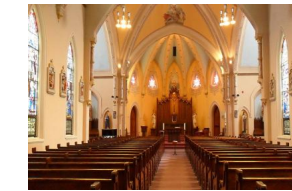




2) Match each word/number to its corresponding picture.









Ocean (1), desert (2), beach (3), cave (4), cliff (5), coral reef (6), forest (7), island (8), jungle (9), mountain (10), rainforest (11), valley (12), waterfall (13), river (14), bakery (15), bookshop (16), chemist's (17), church (18), cinema (19), department store (20), newsagent's (21), office block (22), petrol station (23), post office (24), shopping centre (25), sports centre (26), sweet shop (27), takeaway(28), train station (29)





## Annex C: Material games session 2

- Memory game:

<b>BEACH</b>		<b>CLIFF</b>	
<b>RAINFOREST</b>		<b>WATERFALL</b>	
<b>CAVE</b>		<b>CORAL REEF</b>	
<b>DESERT</b>		<b>FOREST</b>	



**ISLAND**



**JUNGLE**



**MOUNTAIN**



**OCEAN**



**RIVER**



**VALLEY**



- Describing and guessing game:



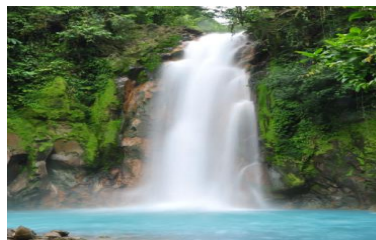
- Sand, waves
- Swim, make sandcastles
- Hot, fun



- Trees / rain
- Walk / listen to the birds singing
- Big / quiet



- Rock / coast
- See the sea / take photos
- High / dangerous



- Water / height
- Fall / get wet
- Natural / beautiful



- Rock / hole
- Play / hide
- Dark / mysterious



- Sea / animals
- Go snorkelling / take photos
- Interesting / colourful



- Sand / rocks
- Ride a camel / jeep tour
- Hot / dry



- Trees / plants
- Go for a walk / run
- Quiet / large





- Land / water around it
- Live / go on holiday
- Large / small



- Vegetation / animals
- See wildlife / explore
- Scary / amazing



- Rocks / peak
- Climb / camp
- High / peaceful



- Water / animals
- Sail / fish
- Calm / agitated



- Water / pebbles
- Fish / have a swim
- Clean / long



- Area between hills or mountains
- Live / visit
- V - shaped / flat

## Annex D: Material games session 3

- Flashcards hung on walls:

BAKERY



OFFICE BLOCK



POST OFFICE



BOOK SHOP



CHEMIST'S



TRAIN STATION



SWEET SHOP



NEW SAGENT'S



PETROL STATION



DEPARTMENT STORE



CINEMA



TAKEAWAY



CHURCH



SHOPPING CENTRE

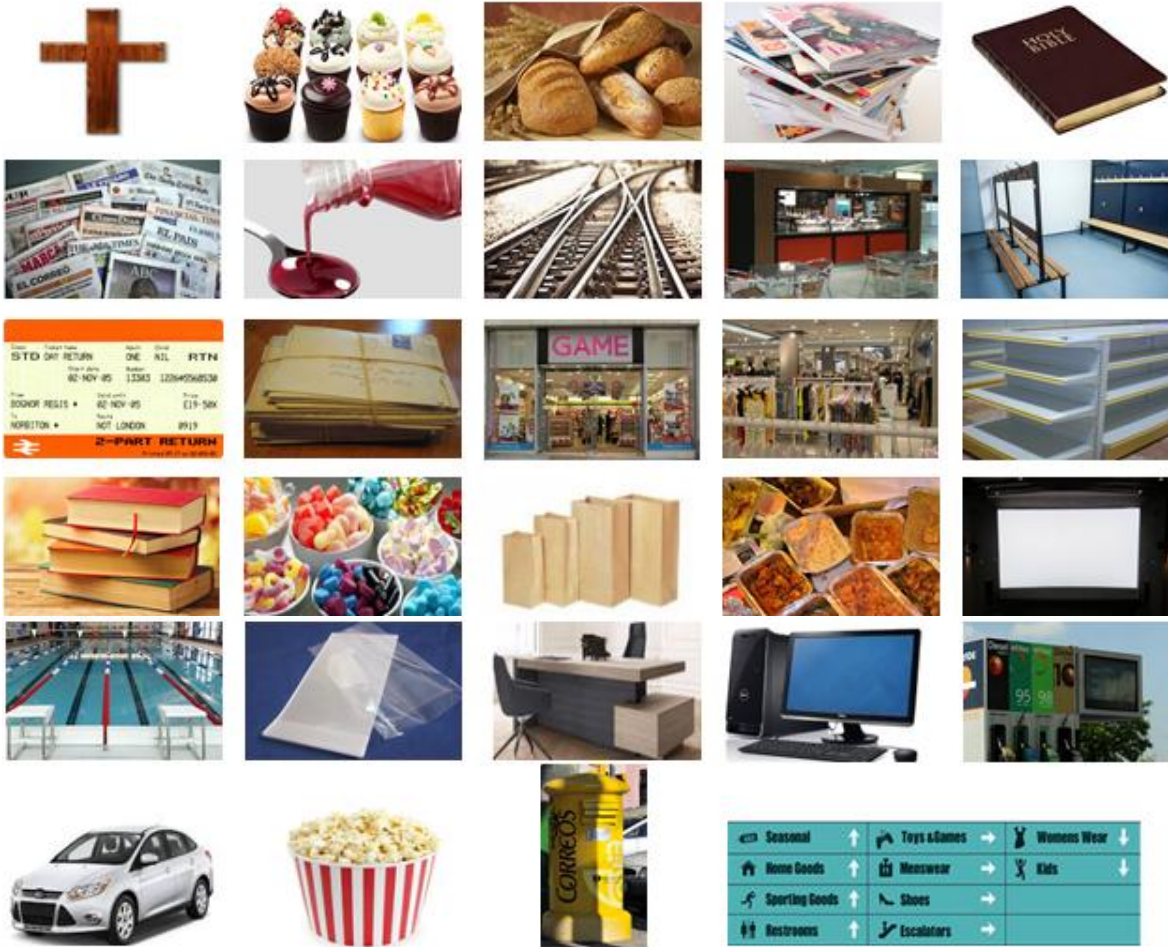


SPORTS CENTRE





- Images found in envelope:



**Links to all the images used in the games:**

<https://goo.gl/MKpW9J> <https://goo.gl/GOqK2F> <https://goo.gl/vUdJ9H>  
<https://goo.gl/un35r9> <https://goo.gl/b3wRNd> <https://goo.gl/b2tav8>  
<https://goo.gl/dgh8XD> <https://goo.gl/3FKDKK> <https://goo.gl/0saomw>  
<https://goo.gl/n61sMy> <https://goo.gl/EqVpBo> <https://goo.gl/z3Zd64>  
<https://goo.gl/XLK2bU> <https://goo.gl/8oomJA> <https://goo.gl/lpPxoJ>  
<https://goo.gl/bSsRO5> <https://goo.gl/ucKXQL> <https://goo.gl/Aerbpl>  
<https://goo.gl/LJbNDG> <https://goo.gl/Hzj7Oa> <https://goo.gl/QZX9LK>  
<https://goo.gl/88Aqs4> <https://goo.gl/ENMM6E> <https://goo.gl/xRTQ6y>  
<https://goo.gl/qR2UR7> <https://goo.gl/iZ9TBN> <https://goo.gl/XRNhjA>  
<https://goo.gl/mYTInC> <https://goo.gl/R2xYyc> <https://goo.gl/xjS7ko>  
<https://goo.gl/J37pOR> <https://goo.gl/NH6jw2> <https://goo.gl/VIR8tD>  
<https://goo.gl/C35zup> <https://goo.gl/bu3Cjv> <https://goo.gl/blm1gV>  
<https://goo.gl/kz6qZp> <https://goo.gl/5VpY2R> <https://goo.gl/TFwW8l>  
<https://goo.gl/ehqPdc> <https://goo.gl/5yrEaS> <https://goo.gl/jo0CCC>  
<https://goo.gl/4kYost> <https://goo.gl/5iaji2> <https://goo.gl/ZWiWq8>  
<https://goo.gl/FsThGv> <https://goo.gl/zWQ9D1> <https://goo.gl/0WgT4p>  
<https://goo.gl/YZM6ms> <https://goo.gl/fVeKjq> <https://goo.gl/qc8VAW>  
<https://goo.gl/kyYRSJ> <https://goo.gl/Zq8ocV> <https://goo.gl/ZFHnUJ>  
<https://goo.gl/GkwdbH> <https://goo.gl/KeTSaU> <https://goo.gl/6dWXhx>  
<https://goo.gl/6Ezo8W>

## Annex E: Statistical tables

### Descriptive statistics pre-test receptive

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental	13	17,54	7,14	1,98
Control	13	17,38	4,44	1,23

### Independent-samples *t*-test pre-test receptive

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pre-test receptive	Equal variances assumed	6,325	,019	,066	24	,948	,154	2,335	-4,665	4,972
	Equal variances not assumed			,066	20,072	,948	,154	2,335	-4,715	5,023

### Descriptive statistics pre-test productive

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental	13	8,54	3,77	1,04
Control	13	8,85	2,26	,62

### Independent-samples *t*-test pre-test productive

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pre-test productive	Equal variances assumed	4,608	,042	- ,252	24	,803	-,308	1,222	-2,830	2,214
	Equal variances not assumed			- ,252	19,653	,804	-,308	1,222	-2,859	2,244

### Descriptive statistics post-tests receptive

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental	13	25,92	2,98	,82
Control	13	21,69	4,07	1,12

### Independent-samples *t*-test post-tests receptive

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Post-tests receptive	Equal variances assumed	1,569	,222	3,022	24	,006	4,231	1,400	1,342	7,120

	Equal variances not assumed			3,022	22,013	,006	4,231	1,400	1,328	7,134
--	--------------------------------------	--	--	-------	--------	------	-------	-------	-------	-------

### Descriptive statistics post-tests productive

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental	13	21,08	4,36	1,21
Control	13	19,69	4,90	1,36

### Independent-samples t-test post-tests productive

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Post-tests productive	Equal variances assumed	,034	,856	,760	24	,455	1,385	1,822	-2,375	5,144
	Equal variances not assumed			,760	23,683	,455	1,385	1,822	-2,378	5,147

### Descriptive statistics delayed test receptive

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental	13	24,77	4,08	1,13
Control	13	21,69	4,78	1,32

### Independent-samples *t*-test delayed test receptive

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Delayed test receptive	Equal variances assumed	,003	,954	1,763	24	,091	3,077	1,745	-,525	6,679
	Equal variances not assumed			1,763	23,425	,091	3,077	1,745	-,529	6,683

### Descriptive statistics delayed test productive

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental	13	23,62	3,90	1,08
Control	13	21,62	4,80	1,33

### Independent-samples *t*-test delayed test productive

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Delayed test productive	Equal variances assumed	,768	,390	1,165	24	,256	2,000	1,717	-1,545	5,545



	Equal variances not assumed			1,165	23,039	,256	2,000	1,717	-1,553	5,553
--	--------------------------------------	--	--	-------	--------	------	-------	-------	--------	-------

**Paired-samples *t*-test experimental group post-tests receptive – delayed test receptive and post-tests productive – delayed test productive**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Post-tests receptive – Delayed test receptive	1,154	4,100	1,137	-1,324	3,631	1,015	12	,330
Pair 2	Post-tests productive – Delayed test productive	- 2,538	4,807	1,333	-5,443	,366	- 1,904	12	,081

**Paired-samples *t*-test control group post-tests receptive – delayed test receptive and post-tests productive – delayed test productive**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Post-tests receptive –Delayed test receptive	,000	3,082	,855	-1,863	1,863	,000	12	1,000
Pair 2	Post-tests productive – Delayed test productive	- 2,077	4,627	1,283	-4,873	,719	- 1,618	12	,132