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THE EFFECT OF ACTIVE BOARD GAME ON VOCABULARY RETRIEVAL AMONG SCHOOL GRADERS

**EL EFECTO DEL JUEGO DE MESA ACTIVE EN LA
RECUPERACIÓN DE VOCABULARIO ENTRE ESCOLARES**

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The effect of Active Board Game on Vocabulary Retrieval Among School Graders

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ABSTRACT

A good knowledge of vocabulary is crucial to successful language learning, so vocabulary learning strategies have been gaining popularity in EFL classrooms. Research in vocabulary learning has been extensively investigated the factors that affect receptive vocabulary, however the amount of research in productive vocabulary is scarce. The study reported in this article aimed to explore and describe to what extent a board game called “Active” affect 10th-grade EFL students' active vocabulary in a public school in Bello. The game was designed as a memory-based strategy and target frequently nouns relevant to students' daily lives. Four lesson plans were applied to 32 students and the classes took place in the classroom. This study used a qualitative method. Vocabulary performance was tested with pre-test and, post-test and during-test after each lesson. The data collection included interviews and observations. The research found significant gains in vocabulary retention and retrieval. Moreover, the game fostered motivation and engagement, highlighting the value of gamification in enhancing language learning.

Keywords: active vocabulary, gamification, EFL education

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El efecto del Juego de Mesa Active en la Recuperación de Vocabulario entre Escolares

RESUMEN

Un buen conocimiento del vocabulario es crucial para el éxito en el aprendizaje de idiomas, por lo que las estrategias de aprendizaje de vocabulario han ido ganando popularidad en las aulas de EFL. La investigación en el aprendizaje de vocabulario ha investigado ampliamente los factores que afectan al vocabulario receptivo, sin embargo, la cantidad de investigación en el vocabulario productivo es escasa. El estudio que se presenta en este artículo tiene como objetivo explorar y describir hasta qué punto un juego de mesa llamado «Active» afecta al vocabulario activo de los estudiantes de 10º curso de EFL en un colegio público de Bello. El juego se diseñó como una estrategia basada en la memoria y se dirigía frecuentemente a sustantivos relevantes para la vida diaria de los estudiantes. Se aplicaron cuatro planes de lección a 32 estudiantes y las clases tuvieron lugar en el aula. Este estudio utilizó un método cualitativo. Se evaluó el rendimiento en vocabulario con pruebas previas, posteriores y durante cada lección. La recogida de datos incluyó entrevistas y observaciones. La investigación reveló mejoras significativas en la retención y recuperación de vocabulario. Además, el juego fomentó la motivación y el compromiso, destacando el valor de la gamificación para mejorar el aprendizaje de idiomas.

Palabras clave: vocabulario activo, gamificación, educación EFL

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INTRODUCTION

If a person wants to use a language, they must have complete knowledge of vocabulary, which means being familiar with the meaning, appropriateness, collocations, spoken and written form, as well as mastering both active and passive vocabulary related to the four skills of language (Nación, 1990). Teachers should recognize that vocabulary is divided into at least four different types and that will give them the ability to better understand the progress of their students. Active vocabulary incorporates the words that students implement in their speaking and writing productions. On the other hand, passive vocabulary covers words that help them understand a conversation or during a reading comprehension activity.

Recent studies underscore the importance of integrating both active and passive vocabularies into lesson plans. However, in Colombian public schools, assessment activities focus more on passive vocabulary, due to multiple circumstances related to time, teaching principles, preparation for SABER tests, lack of teacher training, number of students in class, etc. Considering what has been said, active vocabulary has been avoided or at least left aside, so productive skills in speaking and writing have not made significant advances. Teachers observed with frustration and resignation that students do not actively participate in class and fail in most written and oral activities (Education, 2014).

Another particularly important aspect in language learning is motivation, both types of motivation: extrinsic and intrinsic. According to Lepper (1988), learners perform better when they are intrinsically motivated, and he highly recommends the use of gamification to engage learners in classes and ensure that they can complete activities on their own. Games are common aspects not only in people's lives but also in classrooms where teachers use them for their potential impact on motivation and learning. Many scholars agree that learning occurs when the lesson sparks students' interest and motivation and that in second-language education it is important to introduce gamification into classes because motivation has been consistently linked to learning (Brown, 2007).

However, designing activities to encourage learners' active vocabulary and integrating gamification into lessons is challenging and time-consuming for teachers in foreign language classes; especially in Colombia and the local region (Bello, Antioquia), where students are left with decontextualized classes and content that does not meet their interests, as well as teachers eagerly looking for activities to engage



students in classes. To address the aforementioned gaps, this study seeks to describe the effect of using a board game called “Active” on students’ active vocabulary. This board game has been carefully designed by the researcher, intended to increase active vocabulary with the most useful and used nouns that students need to have a simple conversation in English in their immediate context. The study will be conducted in a public school in the city of Bello, where students belong to stratum two and receive 4 academic hours of English weekly with a communicative focus and where there is no specific textbook to follow, and each teacher has autonomy to choose content from various sources.

Theoretical Framework

What is vocabulary?

Vocabulary is a very important language component in learning a language and is considered a central part of language acquisition. Some linguists like David Wilkins stated that “Without grammar, very little can be conveyed, without vocabulary, nothing can be conveyed no matter if it is a native, second or foreign language. Therefore, we can say that learning a language means learning vocabulary and it is fundamental because no matter how well students learn grammar, pronunciation, and intonation without vocabulary communication does not take place successfully or meaningfully. According to the Cambridge Dictionary vocabulary is defined as all the words that exist in a particular language. Also, Carter (1998) detailed that a word can be defined from two perspectives. From the orthographic, when a word represents a series of letters, and from a semantic perspective, where a word is seen as a sequence of letters organized in a specific form to transmit a definition.

Nevertheless, those definitions are insufficient to explain a complex word such as vocabulary. It is important when defining vocabulary to know its forms and types. Elfrieda and Michael (2005) have stated that vocabulary is the knowledge of word meaning and it comes in two different forms: oral and print. Oral vocabulary refers to words learners identify when they listen and speak while print vocabulary involves the words that learners recognize when they read and write. In addition, the vocabulary can be classified into two types: productive and receptive also called active or passive (the last two words will be used to mention the type of vocabulary during the article). Active vocabulary is used in speaking and writing. Meanwhile, passive vocabulary refers to words used in listening and reading.



Learning Vocabulary

Despite all the investigations of scholars and the recognition of types of vocabulary such as passive and active, it is still challenging for teachers to develop vocabulary for students, and they are confused about whether to teach that vocabulary separately or in a continuum. It is not easy to identify the connection between the two types of vocabulary knowledge from different perspectives, stating that it is usually easier to recall the meaning of a word passively than it is to learn and recall the form of a word to produce it actively (Webb and Nation, 2017). Thus, teachers are constantly implementing strategies to teach vocabulary effectively and they must make learning easier, faster, more enjoyable, and more effective. In line with Schmitt (2010), there are two types of strategies that can be used in vocabulary learning: Explicit and implicit vocabulary. Explicit vocabulary is more focused on learning the language where the learner is attentive to the information to learn, and the teacher plays the role of translator or language provider. On the other hand, implicit vocabulary is a process where learners are more centered on using the language rather than learning it. Although, the classification and agreement of importance of the two strategies, there is not a clear understanding of when teachers should use explicit, implicit, or a combination of both foreign and second language contexts.

Game definition

Throughout human history, games have been seen as a symbol of entertainment, involvement, cooperation a competition. Advanced Learner's Dictionary (8th Ed) defines a game as "an activity or sport" governed by rules, where people must compete against others. Competition and cooperation are present whenever we mention the word game, Jones (1980, as cited in Ameer, 2016) stated that one or two players could play in a game to compete or cooperate depending on the rules that have been set. Others, like Gibbs (1981, as cited in Ameer, 2016), ensured that games are activities developed by competitive or cooperative decision-makers. In addition, Rixon (1981) said that games include a beginning and an end. From all these definitions, it can be concluded that a game is an activity with rules centered on cooperation and cooperation which takes place in an enjoyable atmosphere. This definition might be extrapolated to foreign and second language classrooms where teachers implement games to reinforce or practice the objectives of the lessons and it is based on language and the aim to enhance language skills. In language games, learners might use words, mime, gestures, and body



language. When games are used to in non-games context that is called gamification, according to Kapp (2012) gamification is defined as “using game-based mechanics, aesthetics, and game thinking to engage people, motivate action, promote learning, and solve problems” (p. 10), that means that teachers can use elements taken from games in class, lately, the use of gamification has become very popular due to the potential benefit of learning and the motivation of learners.

Teaching Vocabulary Using Games

Some decades ago, games were primarily used for physical activities, and steadily games started to be introduced in the educational arena. In the EFL and ESL context games have been gaining more prominence. Lately, they have become an important tool that allows teachers to introduce challenges and entertainment to the classes. Using games in learning vocabulary has attracted a lot attention from scholars and teachers, Donmus (2010) found that when games and education are combined there is a good atmosphere for learning languages. In fact, learning vocabulary is crucial in language learning but also it is challenging, and students usually think that it is a boring process because they must memorize and decontextualize words, in light of that, games have come to stay and are considered advantageous, and effective in learning vocabulary. However, to achieve in vocabulary games teachers must choose a suitable game considering students' needs, context, level, and many other aspects. To choose a suitable game is worth mentioning the game Learning approach. Van Looy (2016) classified games into two types of games: The first is a game exclusively created for educational purposes and the second is when the game is conducted to provide entertainment. There are thousands of games to be used in EFL and ESL classes and they can be chosen according to language skills (listening, speaking, reading, writing).

Language is made up of words and if we want to use the language effectively it is imperative enough stock of vocabulary, but it is we must keep in mind that vocabulary learning involved to know how to spell words, how to pronounce them, their collocations in context and appropriateness as well (Nation, 1990). Therefore, vocabulary learning strategies play a crucial role in making learning easier, more enjoyable, and more effective and a key point we want to address in this investigation is to enhance comprehension and storage of vocabulary. To succeed in choosing vocabulary learning strategies teachers should frame these strategies to recognize what type of activity will fit better on students.



Schmitt (1997) has consolidated a taxonomy of vocabulary learning strategies that are vital for remembering vocabulary. He divided them into four types: Metacognitive strategies which are connected to decision-making, social strategies with exercises where learners interact by asking and answering questions, cognitive strategies like verbal and written repetition and memory or mnemonics strategies when the previous knowledge is linked with the new word using association or imaging.

Memory strategies

Many vocabulary learning strategies are suitable for learners according to their styles, age, attitude, gender, context, motivation, personality, and so on. However, in this investigation, we will highlight memory strategies also called mnemonics. As Oxford (1990) stated, vocabulary memory strategies help learners store specific information and retrieve it when required. Also, Heuer (1999) suggested that when the new vocabulary is rehearsed with memory strategies it will be transferred to long-term memory. This last theory is closely related to what a board game called active pretends to achieve with school students' vocabulary, which most of them use to comprehend a conversation or in reading activity (passive) but at the time talking they cannot retrieve them to express they want to say, in other words, transfer from passive vocabulary to active vocabulary and processing the vocabulary in the working memory and store and retrieve from learn term memory and in that way learners can learn vocabulary faster and recall it better. Concerning the Colombian context usually fail to apply the most suitable and effective vocabulary learning strategy and enable learners to become more autonomous (Pineda, 2010). Thus, it is an imperative need for teachers to help learners acquire more vocabulary, and learning vocabulary through memory activities might contribute to that issue teachers should be aware of its benefits and the variety of them: Image word form, connecting words with its synonyms and antonyms, study the spelling of a word, say the new word aloud, use physical action when learning a word, group words together, image word's meaning, etc. Schmitt (1997) categorized memory strategies into six subcategories: learning new words through pictures, connections between new words and relevant words, linking the new words with irrelevant words, grouping, using the orthography or sound of the word, and including physical action.

Once we mentioned the concept of vocabulary, the vocabulary strategies, the definition of a game and its role in EFL and ESL learning context, and previous studies in vocabulary learning, it is pertinent to



explain how the investigator pictures the material designed to apply in this study. It is a board game called “Active” which will be used in this study as a learning vocabulary strategy to activate students’ vocabulary. First, it is a cooperative and competitive board game where learners might learn vocabulary under an implicit strategy. In addition, according to Schmitt’s taxonomy Active might be considered a memory or mnemonic strategy that consists of learning new words through pictures and the sound of the word where players are exposed to visual and oral repetition of vocabulary while they are playing and enjoying.

How Does Memory Work

The word memory entails different types of abilities which take place in different types of memory such as working memory where responsible for temporarily string and manipulating information, semantic memory where are stored general knowledge of fact of the world, or episode memory in charge of remembering episodes of our life it is like travelling to the time mentally and pick the main events. This kind of memories listed represents only of the recognized by many theories and psychologists, even there are others like collective memory, and autobiographical memory among others depends on the author we decide to study. Nevertheless, for the purpose of this study the processes that occur in the episode memory will be highlighted. According to the physiologist (Melton, 1963) there are three necessary stages in the learning memory process, they are encoding, storage and retrieval. The encoding process is defined as the initial experience of learning, this stage can take place in many ways considering physical and mental environment and people are constantly remembering and encoding events at least for a while because encoded information is not a guarantee it will be remembered later. The other Process is storage where the experiences create memory traces, but the Melton pointed that those memory traces do not act like recording machine but the process of remembering involves reconstruct the past events. And the final stage, stated by Melton, as the most important because human can encode and store too much information but most of it is wasted and we only can access to a small part of that information in our brains, so retrieval memory is defined as the ability to access information when it is required. Melton directed special attention about the factors that determine what information can be retrieved, and the main one is the type of hint or clue.



Previous study

Many researchers have investigated vocabulary learning as a second or foreign language. Nevertheless, this study in particular needs special attention about the types of vocabulary to understand how vocabulary memory works. His study *Testing Vocabulary* (Kitao & Kitao, 1996) stated that vocabulary can be divided into four types: Active speaking vocabulary, active writing vocabulary, passive listening vocabulary, and passive reading vocabulary. Teachers should be aware of the type of vocabulary they will test to choose the appropriate material according to learners' needs. Recognizing the types of vocabulary helped the investigator to narrow the investigation and understand the students' concerns and obstacles in vocabulary learning, especially relying on active speaking and writing vocabulary. Complementary, it was relevant to know that some research aims to investigate the effectiveness of some tools or resources to enhance passive and active vocabulary and the results were not satisfactory in either type. For instance, Miyazaki (2019) investigates the effectiveness of an online vocabulary learning device in Japan on the gains in passive and active vocabulary use at a range of proficiency levels and the results showed that there was little improvement in active vocabulary and the study highlighted the need to include tools that allow students improve their word production and long-term memory.

In other research regarding learning vocabulary in the EFL context through Vocabulary learning strategies by Ghazal (2007), where he highlighted the importance of word knowledge for both production and comprehension in a foreign language and he encouraged teachers to help students to become independent learners and he stated that this might be achieved if teachers instruct learners to apply vocabulary learning strategies. In his study, Ghazal pointed out different taxonomies of vocabulary learning strategies previously listed by Gu and Jonhson (1996), in this study Ghazal mentioned metacognitive, cognitive, memory, and activation strategies. The description of memory strategies was essential to understand the characteristics of "Active" board game and how the learner's memory would work during the study. Gu and Johnson classified memory games into rehearsal and encoding categories, the last one which best suits the present game applied in this study. The encoding category is based on association, imagery, visual, auditory, semantic, and encoding.



METHOD

This study aimed to explore and describe to what extent “Active” board game affects the effect school 10th graders vocabulary, which employed a qualitative research design. The reason for using this method is to get an in-depth understanding of how “Active” board game affects English vocabulary to young 10th graders and obtain a deep and wide perspective of students, to determine the effect on their active vocabulary.

Research questions

The present study addresses the following research questions:

A. General question

- How does a board game called “Active” affect a school learner’s vocabulary?

B. Secondary questions

- What are students ‘concerns and likes at the time of learning English?
- How much vocabulary about daily routine can students retrieve?
- How can students improve vocabulary retrieval?

A. Participants

To achieve the aims of this study a total of 32 10th graders from a public school named Andrés Bello in Colombia participated in this study: 14 males and 18 females, between 14 and 16 years of age. The school has 600 students and most of them fit into low socioeconomic strata. The school has a social and cultural focus, and it is recognized as one of the best in the academic area. The infrastructure building is more than 50 years old. It has three floors and each one of them with 10 classrooms which have 35 students. Some classrooms have been equipped with video Beam and smart boards. Spanish is their native language, and the target language is English. Grounded on their educational background and language learning experiences, no participants could have been described as proficient or fluent English speakers

B. Data Collection Instruments

Data collection instruments included a questionnaire, a pre-test, three during tests, a final test, four lesson plans, sixteen interviews and four peer observations



1. Questionnaire

Data collection participant responses about how they would like to learn English, the tools and resources to use in class, and the difficulties of learning vocabulary were collected using a questionnaire. The questionnaire consisted of 2 questions, question number one was an open question that required students to write their free responses, the second question was multiple-choice.

2. Pre-test

In this study a test was designed to diagnose how much vocabulary students knew and how active that vocabulary was in their brains. The test consists of a vocabulary test that requires students to write down the corresponding word from Spanish to English of a list of 57 nouns. The words were selected considering the most mentioned words that students wrote in English class in a written exercise about daily routines and personal information.

3. During tests

After each lesson plan was applied to students using Active board game as a central part of the lesson, a follow-up test was applied. It consisted of asking randomly one member of the groups (there were 8 groups of 4 students) the name of some images projected on the board through the video beam, he or she had to say the name of the image and then receive feedback from the group and teacher regarding the correct name and pronunciation of the noun.

4. Post-test

Once the groups had played the board game during four direct teacher lessons, on the fifth day they were tested on their vocabulary learning focusing on their codification, storing, and retrieving of the 57-word nouns they were exposed to. It comprised an oral test, where the 32 students were asked one by one, the criteria involved knowing the word in English and the correct pronunciation of it.

5. Lesson Plan

In this study, four lessons were implemented, the researcher planned, acted, observed, and reflected on learners' reactions to investigate how “Active” board game affected learners’ active vocabulary



6. Interview

After each lesson plan, four students were selected randomly to take a semi-structure interview to collect information about the student's opinions, and feelings about playing "Active" board game to learn English vocabulary.

7. Observations

Also, to obtain more reliable information the researchers asked a colleague from the same school to observe the lessons following a format to check learners' reactions during the four lesson plans to provide objective feedback about it and give some general recommendations so that the learners and the researcher could take them into account for the next lessons.

C. Procedure

The main concern of this study was to investigate the effect of a board game called "Active" on students' active vocabulary. To accomplish this, 32 10th graders from a public school participated in this study. For this purpose, a questionnaire was administered to know students' preferences and the obstacles to learning English. In addition, pre-, during, and post-tests were conducted to investigate their progress in terms of active vocabulary use. Also, a lesson plan was designed to develop on three different days to guide students on what they had to do before, during, and after playing "Active" game.

The lessons were carried out taking into account the following sequence of phases. A warm-up, to catch the learners' attention through random images selected from the 57 nouns of the "Active" game, they were asked individually, to practice pronunciation and retrieving the names. Right after, there was an opening where the teacher projected the "Active" on the whiteboard and explained the rules to play it, subsequently, students paired their groups of 4 and started playing the game with the cards given by the teachers for approximately 1 hour. Finally, the closure of the lessons where teachers give feedback about the pronunciation of words and ask students about their perceptions of the game, and the teacher considers it for the next lessons. Through these lessons, intended to achieve the following objectives:

General Objective

- To explore and describe to what extend "Active" board game affects school 10th graders' vocabulary



Specific Objectives

- To make a diagnostic about learners' interests and concerns in learning English classes
- To make a common nouns diagnosis on 10th graders
- To design a series of lesson plans based on the implementation of "Active" board game to help students to retrieve vocabulary
- To implement four lessons plans based on the implementation of "Active" board game to help students to retrieve vocabulary

D. Material

A total of 8 Active sets were implemented in this study, each set contained 57 different mix images distributed in 55 cards. The images were chosen considering the most useful nouns students need to talk about daily routines and habits. The investigator selected them from their writings once he identified the most common using the Excel program. Each card contained 8 different images, and the main characteristic of the cards is that all of them had an image in common, which was the target of the game "to identify the repeated image". This material was the investigator's resources, printed in resistant and malleable material that facilitated the manipulation.

DATA ANALYSIS

To understand the data collection procedure is necessary to have clear that it was implemented during the whole investigation to reach a wide perspective on the effect on school learners' vocabulary through a board game called "Active". Once the investigators reach the data using the data collection instruments (questionnaire, pre-test, during-test, post-test, lesson plan, interviews, and peer observations) Burn's approach was followed with 5 steps (Burns, 2001).

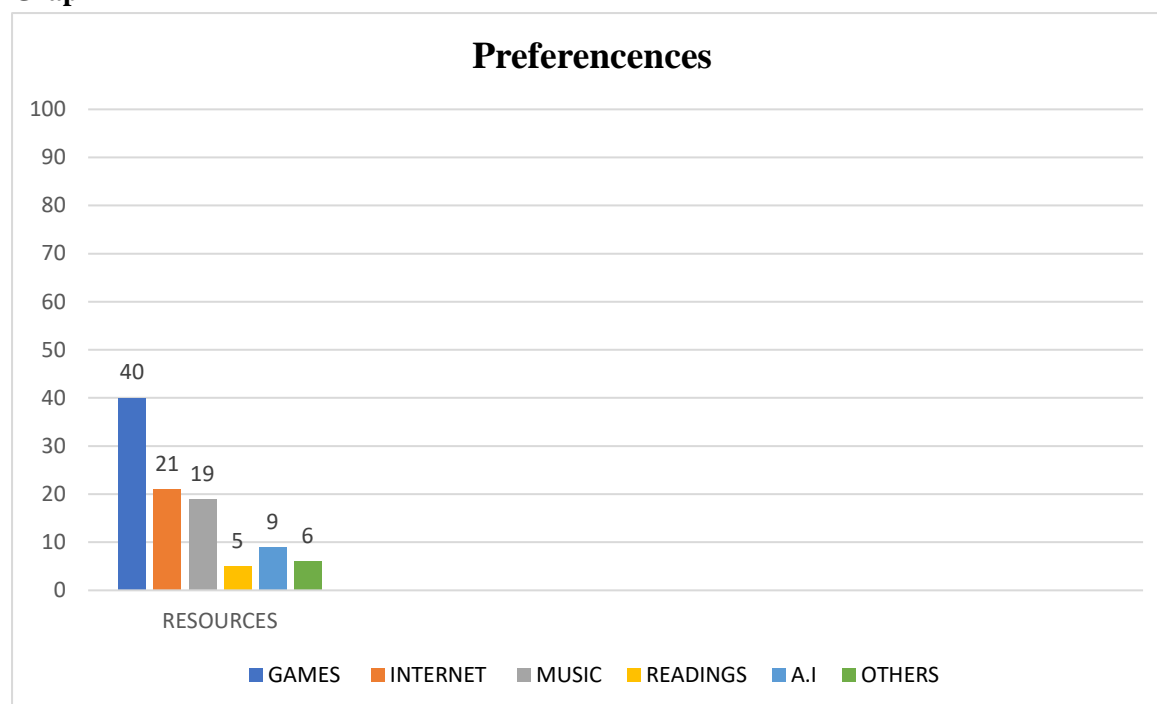
FINDINGS AND DISCUSSION

Students' concerns and likes

Initially, the researcher administered a survey where students were asked about the resources they would like to implement in the English classes with an open question and the main difficulties in learning English with a multiple-choice question that contained the language skills and subskills as potential answers. A total of 32 students participated in this study, and each one took the survey. The graphic presents the results of the list of resources in which they preferred to participate in English classes.



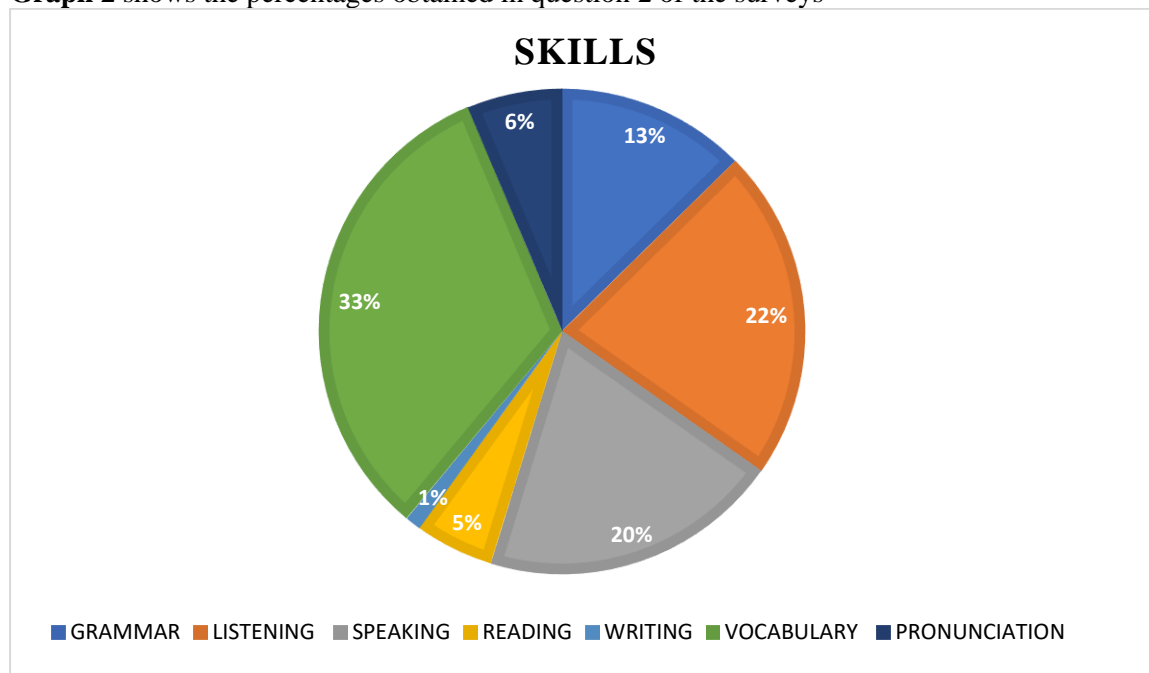
Graph 1



According to Graph1, from a total of 32 students 40% of the students preferred games, this cipher represents the highest percentage. Subsequently, 21% of the students chose the Internet as their best alternative. Also, a considerable number of people have agreed that music must be included in learning English. Most students chose the previously mentioned resources to be included in the English classes. Nonetheless, there were other resources mentioned by a few students such as using reading with 6% and the use of Artificial Intelligence with 9%. Finally, a couple of students suggested other options which represent only 5% in the graph.

The students chose the games to use in class because games are present in different areas of their lives and in a language learning process that is complex for them for many circumstances, they want to learn it easily and they immediately associate games with education (Donmus, 2010).

Graph 2 shows the percentages obtained in question 2 of the surveys



In graph 2 the main student's concerns in terms of skills and subskills are seen in percentages. Most of the students have highlighted vocabulary as their main difficulty in learning English with 33%. Then, we can see the listening and speaking skills with 22% and 20% correspondingly. Also, it shows other subskills such as grammar and pronunciation which also are causes of worry for students with 13% and 6% in that order. Finally, the reading and writing skills appeared with the lowest percentage, 5% and 1%. Students' concern shows that no matter how much they might know about grammar rules, pronunciation, and other components of the language, however, without enough vocabulary they cannot communicate their ideas nor recognize the vocabulary they can encounter and it seems to be their main concern, in one of the interviews one student said this: Interview lesson # 1 “*Listening and speaking is difficult BUT if we knew more vocabulary would be easier*”

Students' answers addressed the objective related to students' preferences as well as their concerns about learning the English language and was the beginning to look for a strategy that allows improving students' vocabulary through games coming out with the creation of a board game called “Active”

Failing retrieving vocabulary

During this second stage of the study, a pre-test was applied in which the students had to translate a list of 57 nouns into English. The findings were under the expectations because most of them did not remember the corresponding word in English, some of them retrieved the vocabulary but made spelling

mistakes. The investigator considered the school assessment system where students can pass a test reaching at least 60%, so as the number of nouns was 57 the 60% represents 34 nouns. Considering this, the results showed that from a total of 32 students, only 10 students could reach above 60%. The other 10 students answered between the range of 20 and 30 nouns correctly and finally the rest were under 20 correct answers.

The results of this pre-test deserve a deep analysis, as cited in the theoretical framework vocabulary knowledge includes the understanding of the forms, meanings, and the practical use of the word, so if we observe the result most of the students did not remember the form of the word, it means the orthographic perspective, they might need to associate the image with the spelling of the word and the board game “Active” appeared as a suitable option. Regarding the semantic perspective, there is no evidence of the student’s performance before the proposal of the game was implemented. It would be necessary for future investigations to widen that perspective, and the students could practice vocabulary in context or communicating a complete idea Carter (1998).

Also, as mentioned above in the literature review the vocabulary can be classified into two types: productive and receptive and the results indicate that only 10 students of 32 total reached the minimum to approve (60%). However, it is necessary to mention that the pre-test was focused on testing productive vocabulary and the results might be different in a test focused on receptive vocabulary. To understand better this discussion, it is worth bringing up students' opinions in the interviews.

Interview lesson # 2: *“I understand some words in a text or a reading but at the moment to translate from Spanish to English I cannot remember; it is like our brain needs some help to remember vocabulary that we need immediately.”*

From short to long-term memory

After each during-test was applied at the end of each lesson where 1 student per group was called to take the test presented the following results. The performance of students started to improve lessons after lessons showing that the codification process took place steadily. It means that the information that was initially in the working memory started to be transferred to the long-term memory participants. During the first test, 6 students selected reached more than 60%. At the end of lesson 2, the total of students reached 60%.



The results were improving surprisingly fast, and in lesson 3 the 8 students who took the test reached above 80% in the final test 6 students reached above 90% and 2 of them did it perfectly reaching 100%. This finding is very relevant for this study considering that the main objective is to explore and describe to what extent “Active” board game affects students’ vocabulary and the students showed a significant improvement lesson after lesson as was explained above, this ratified what Heur (1999) has suggested about the importance of memory strategies helping students to transfer vocabulary that they observed and hear playing “Active” game to long term memory what is called the codification process.

Successful retrieving by clues and free

Lastly, on the fifth day of study students took a final oral test but this time the whole universe of the study was involved (32 students). The test was divided into two parts, firstly, students were asked to say the corresponding word in English of the 57 nouns practiced during the whole study they had to retrieve the information free without any clue, the results were highly satisfactory, absolutely all the students reached above 70% of the nouns and 25 students above 80%. In the second part, the students had to retrieve the nouns using images as clues, like what they did in the game, they could see an image and then say the name in English. The results were extremely high, all 32 students reached above 90% and 20 amazingly reached 100%.

This finding is the complementation of the previous one and both are in harmony with the main objective of this study which pretends to explore and describe the effect of “Active” board game affects students’ vocabulary. To discuss the results and the main objective it is essential to mention that “Active board game is within the vocabulary learning strategies suggested by Gu and Johnson (1996), particularly memory strategy and classified as an encoding strategy where students associate the image with the word including the orthography and pronunciation. During the lessons, students were exposed to play “Active” repeatedly and each during-test plus the observations showed that they were improving significantly lesson after lesson, to understand this phenomenon was necessary to investigate more about the way memory works.

So, students firstly, were exposed to seeing the images and listening to the sound and the words, and their sensorial memory was activated, then when they started to play, the association of the images with the sounds and orthography was stored in their short-term memory that occurs when people need

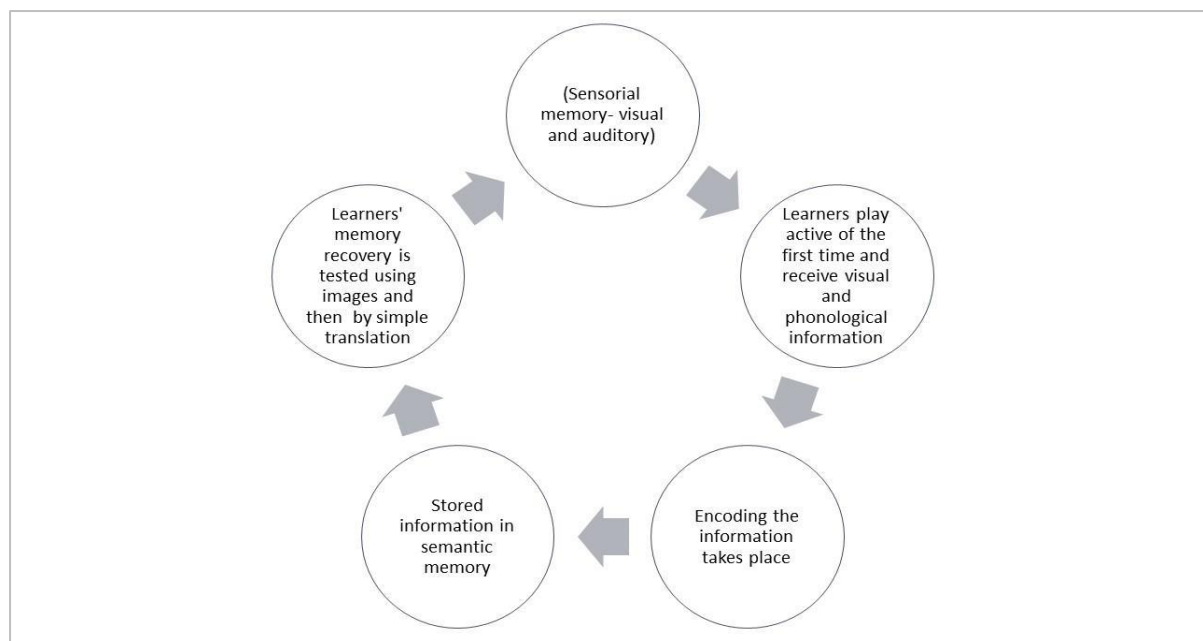


immediate information to do activities every day also called working memory. The next step was that students could encode the information which means that the information in short-term memory was transferred to the long-term memory, this step occurs when the information can remember during more time, in the external observation was recorded the following Observation Lesson # 2: *“When I asked at least one member on each group for five words randomly they could remember easily”*

In the final step, the students did it very well and satisfactorily retrieved the vocabulary, the information was stored in the episodic memory and the proof of this is the result obtained in the final test where 70% of them could retrieve the information without any retrieval clue and 90% used the image that represents the word as a retrieval clue (Ameer, 2016).

The following figure # 1 illustrates according to the investigation and the theory investigated how students could effectively store the information of the nouns expose in “Active” game.

Figure 1



Emerging category

Enjoyable atmosphere

The results of the interviews and observations during the four lessons allowed the investigator to find that while students cooperated and competed in playing “Active” board game they enjoyed cooperating and competing with their classmates.

All students interviewed expressed their philia with the board game. In one of the interviews, one student stated the following: “Class was a safe place to learn free of the pressure of failing due to bad results and in this time, they learn the words in English with an objective in mind, it is to compete and cooperate during the game”.

This finding it is related undirectededly with the main objective of the study which pretends to explore and describe the effect of “Active” game on students’ vocabulary because there are many studies which suggest the benefits of gamification on learning and motivation. One of the characteristics of games is that they involve cooperation and competition (Gibbs, 1981, as cited in Ameer, 2016) and during the lesson plan when learners were playing “Active” was registered by the external observer that: *“students cooperate among them to improve pronunciation and explain the rules perhaps if a member forget it, and this atmosphere benefits the learning of vocabulary”*. Also, once students had taken confidence and they were enjoying the game, there was a strong sense of competitiveness and they seemed to be very concentrated in winning. With these results “Active” board game has been shown to have positive results on both learning and motivation.

CONCLUSION AND PEDAGOGICAL IMPLICATIONS FOR EFL TEACHERS

Overall, in the results obtain during this investigation “Active” board game appears as an effective vocabulary memory strategy which could be implemented in EFL environments to help students to improve active vocabulary. The evidence found in tests, observation, and interviews strongly suggest that “Active” helps with the consolidation of vocabulary on learner’s memory, having room to the three stages investigated by the phycologist Melton (1963) coding, storage and retrieval where final students can use the information when they want to express it, in that case using images as a retrieval clue. Also, the atmosphere described by leaners and the observation ratified that gamification has a great influence on learning as well as motivation as long as the game is well explained, appropriate for their age and takes the suitable time. Nevertheless, there have been researched a small hand of studies concerned vocabulary learning and gamification in EFL, and through “Active” board game might be investigated further effects on related skills such: Spelling, grammar, pronunciation, intonation, and so forth.

In addition, when the learners took the survey, they agreed on vocabulary as the main concern at the time of learning English language, so they will learn easier if they have strategies to learn more



vocabulary. In the same survey the results showed that most of the students see on gamification the best option to accompany the English classes

Another aspect that was explored in this study was the learners' vocabulary range, particularly active vocabulary about nouns needed to talk about daily routines. The results taken from the pre-test showed that most learners failed at the time of retrieving vocabulary, only ten students reached above 60% of the words tested. More research also needs to be done to test the passive vocabulary on students or the semantic perspective, to analyze if they really understand the word in context. This conclusion is the answer to one of the research questions about knowing how much vocabulary about daily routine students could retrieve in a writing exercise.

Finally, when the investigator had investigated about students concerns and preferences to learn English, and knew their performance on retrieving vocabulary, it was created "Active" board game as a strategy to improve vocabulary retrieval on students. It was thought about a vocabulary strategy focused on memory, working on memory following the steps suggested by the psychologist Melton (1963) coding, storage and retrieving vocabulary. The investigator applied four lessons based on "Active" game, which were apply consecutively, it means day after day.

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