

THE USE OF MNEMONIC TECHNIQUES TO IMPROVE LONG -TERM MEMORY  
IN VOCABULARY LEARNING

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## TABLE OF CONTENTS

LIST OF TABLES	v
LIST OF FIGURES	vi
ABSTRACT	
CHAPTER 1: INTRODUCTION TO THE STUDY	
Introduction to the Problem.....	9
Problem Statement .....	10
Research Question .....	12
Hypothesis .....	12
Significance of the Study.....	12
Objectives .....	13
General Objective .....	13
Specific Objective .....	13
Limitations .....	14
Definition of Terms .....	15
CHAPTER 2: LITERATURE REVIEW	
Language and Thought.....	17
Vocabulary and Memorization.....	17
Memory .....	18
Mental Representations.....	18
Sensory Representations .....	19
Visual Representations .....	19
The Auditory Mode .....	19

Verbal Representations .....	19
Information Processing.....	20
Sensory Memory .....	21
Short-Term Memory .....	22
Long-Term Memory.....	22
Varieties of Long Term Memory .....	23
Declarative Memory.....	24
Semantic Memory.....	24
Episodic Memory.....	24
Procedural Memory.....	24
Explicit and Implicit Memory .....	25
Explicit Memory .....	25
Implicit Memory .....	25
Encoding and Organization of Long Term Memory .....	25
Levels of Processing .....	26
Deep and Shallow Processing .....	26
The Encoding Specificity .....	27
Context and Retrieval .....	27
Mnemonic Techniques.....	27
Rhymes and Songs.....	27
Method of Loci.....	28
Keyword Method.....	28
Practice Makes Perfect.....	29
Networks of Association .....	29

Spreading Activation .....	30
Hierarchical Organization of Information.....	30
Schemas .....	30
Retention and Language Loss.....	31
CHAPTER 3: METHOD	
Design of the Study.....	32
Subjects.....	32
Materials.....	32
Instruments.....	33
Procedure.....	33
Variables.....	37
Dependent Variable.....	37
Independent Variable.....	37
Data Analysis .....	37
CHAPTER 4: RESULTS	
Pretest .....	38
Posttest .....	45
CHAPTER 5: DISCUSSION	
Discussion .....	55
CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS	
Conclusions .....	57
Recommendations .....	58
REFERENCES	
APENDIX	

LIST OF TABLES

Table 1. Data Matrix Pre- Test results (Experimental Group)

Table 2. Data Matrix Pre- Test results (Control Group)

Table 3. Pre-Test Results (Experimental and Control Groups)

Table 4. Pre-test Frequencies

Table 5. Data Matrix Post- Test Results (Experimental Group)

Table 6. Data Matrix Post- Test Results (Control Group)

Table 7. Parallel between the pre-test and post-test in both groups

Table 8. Parallel between the Pre-test and Post –test frequencies Experimental and Control groups.

LIST OF FIGURES

Figure 1. Pre-Test Results (Experimental Group)

Figure 2. Pre-Test Results (Control Group)

Figure 3. Parallel Pre-Test Control and Experimental Group

Figure 4. Pre-Test Percentage (Experimental and Control Group)

Figure 5. Post-Test Experimental Group Results

Figure 6. Post-Test Control Group Results

Figure 7. Post- Test Frequencies and Scores (Experimental and Control Group)

Figure 8. Pre-test and Post-Test Percentages (Experimental and Control Group)

## ABSTRACT

The relationship between language and thought has been widely investigated by many researchers such as Vigotsky (1962), Fotos S. (1993) and Pinker (1994) among others. Nowadays, one of the most frequent problems in EFL is that students forget quickly the knowledge that they acquire in classes especially in terms of vocabulary, so this study tries to provide practical solutions to this problem with the use of mnemonic techniques. These techniques were tested using intact group design at Institución Educativa Municipal Santa Barbara. The results of this research were satisfactory because they demonstrated that lexical competence is a skill to be mastered with the use of mnemonic techniques.

## RESUMEN

La relación entre lenguaje y pensamiento ha sido altamente investigada por muchos investigadores tales como Vigotsky (1962), Fotos S. (1993) y Pinker (1994) entre otros. Actualmente uno de los problemas más frecuentes en EFL es que los estudiantes olvidan rápidamente el conocimiento que adquieren en clases, especialmente en términos de vocabulario, por lo tanto, este estudio trata de proveer soluciones prácticas, para este problema con el uso de mnemotécnicas. Estas técnicas fueron probadas utilizando el diseño de grupo intacto en la Institución Educativa Municipal Santa Bárbara. Los resultados de esta investigación fueron satisfactorios porque demostraron que la competencia léxica es una habilidad que puede ser perfeccionada con el uso de mnemotécnicas



## CHAPTER 1: INTRODUCTION TO THE STUDY

### Introduction to the Problem

The increasing interest for developing lexical competence in foreign language learners has heightened the need for considering different perspectives on the relationship of thought and language; both are essential components for the successful development of fluency and accuracy in English as a foreign language. This orientation leads teachers and students to conceive language and thought as integral parts of language use.

Nowadays, one of the most frequent problems with vocabulary learning in EFL / ESL is memorization because very few times the students are able to remember the vocabulary that they acquire in classes; generally, this knowledge is forgotten after the exam or a short period of time. Actually it is clear that teachers are more interested in the quantity of information transmitted to the students than the information process that occurs in students' minds.

This is one of the most important reasons that teachers often fail to develop lexical competence. As teachers, it is necessary to take this into account and find ways of helping students to combat the effects of memory decay, giving them the tools to improve their retention of information and also thinking resources that permit to make the experience of learning vocabulary more memorable.

Likewise, many educators have suggested that students should receive especial training on the active use of strategies to control and enhance their language learning process (Cohen 1998). In fact, extensive research in general education indicates that students who report active use of long- term memory techniques are likely to be more successful in learning new skills than are students who do not use techniques.

When students have clearly defined goals, high motivation and control of their learning through long term memory techniques use, favorable learning outcomes result. Therefore no approach model of foreign language learning would be complete without considering these techniques.

According to Sandra Fotos (2001), cognitive scientists make a distinction between short- term or working memory and long- term or secondary memory. Short term memory receives input but is limited in storage capacity. Research suggests that generally only seven items can be stored for about a minute in short- term memory. Waugh and Norman (1965) note that the small amount of information stored in short term memory can be kept for roughly 20 to 30 seconds unless the person makes a deliberate effort to maintain it longer by repeating it over and over; whereas long term- memory is limitless. Transfer from working memory to storage in long- term memory is therefore very important to the students because they will keep in mind longer the knowledge that they need to communicate effectively.

The importance of promoting a deep level of processing is to transfer information from short term memory to long term memory which has almost unlimited storage capacity. If students store their knowledge as long term memory this knowledge will be permanent and will not be forgotten which is transcendental if the objective is to learn a new language. Besides, the more students manipulate and think about a word the more likely is that the word will be transferred into long term memory.

#### Problem Statement

In this city, teachers rarely take into account the relationship between language and thought; they simply give a list of words without thinking what is happening at that moment in the students' mind. Traditionally students are forced to learn vocabulary by their own means because the emphasis is on teaching grammatical structures, neglecting

the importance of vocabulary and thinking that vocabulary could simply be left to take care of itself. (Schmitt 2000)

In the same way, new words generally are presented in isolation, what is one of the most common obstacles to acquire lexical competence. Within schools of Pasto, words should not be presented in isolation and should not be learnt by simple rote memorization. It is important that new vocabulary items be presented in contexts rich enough to provide clues to meaning so that students are given multiple exposure to items they should learn.

Moreover, students are forced to be autonomous and independent to learn vocabulary outside the classroom simply because the exposure to the target language is limited in class. Besides, the few hours assigned by the government to the English classes and the incorrect distribution of them in the schools of this city have made language learning difficult in so much as different lexical and grammatical contents explained in the earlier session class.

Memory has been divided into two general types, declarative and procedural memory. Declarative memory refers to memory for facts and events much of which can be consciously stated or declared for instance when students are able to store the meaning of a word in their minds they are drawing on their declarative memory.

In contrast, procedural memory is knowing how to do something and is usually unconscious. Like any other skill such as driving a car singing a song or playing the piano, the ability to speak a foreign language fluently is a skill that is dependent on procedural memory use. These two types of memories are suggested to exist in long-term memory.

### Research Question

What is the effect of mnemonic techniques to improve long-term memory in vocabulary in fifth grade students of Institución Educativa Municipal Santa Barbara?

### Hypothesis

For this study it has been selected a positive hypothesis, the mnemonic techniques influence positively in long-term memory of vocabulary.

### Significance of the Study

In school learning environments the importance of vocabulary learning is at the very heart of communicative competence, the ability to communicate successfully and appropriately (Coady and Hucking 1997); so vocabulary is conceived as a very useful language skill that learners can exploit for their communicative needs in four skills reading, writing, speaking, and listening rather than a tedious and complicated set of words to be memorized and to be used solely for identifying and correcting their errors as usually happens in this context.

It was found that the amount of vocabulary was closely related to the effect of instruction in the classroom (Krashen & Terrell, 1983); nevertheless, it is clear that in EFL context teachers do not take into account that developing lexical competence requires to train students' minds using specific techniques and strategies to improve their vocabulary learning.

This research tries to face this aspect using different long term memory techniques that facilitate storage and retrieval of new information through grouping, associating and contextualizing knowledge, and at the same time the purpose is to give solutions to this problem and to know more about what is the most appropriate way to teach vocabulary successfully.

In the same way, the use of a variety of activities of long term memory can give the students the opportunity to practice the new vocabulary in meaningful tasks and exercises that are essential tools in foreign language learning. The idea is that if the students are asked to analyze and react personally to new information, it will help them process the language more deeply, facilitating their ability to retain it in their long term memory which is a powerful argument for carrying out this research

Additionally, it is hoped that this research could be useful for all students and teachers that want to be able to develop implicit and explicit memory, because this paper has taken as a core of study the needs of learners in acquiring lexical competence and the role of the teacher in guiding them toward this goal

### Objectives

#### *General Objective*

To increase the vocabulary in long term memory through the use of mnemonic techniques in fifth grade students of Institución Educativa Municipal Santa Barbara.

#### *Specific objectives*

- To improve the lexical competence of fifth grade students of Institución Educativa Municipal Santa Barbara.
- To apply the method of Loci, Keyword method and Rhythms and Songs to improve vocabulary.
- To provide the students and the teachers with specific mnemonic techniques as alternative tools for developing lexical competence in a long term.
- To analyze the possible effect of these techniques in the development of new words in long term memory.

### Limitations

During the development of this research only two limitations were found.

The first one and the most important was the students' level, because unless they were willing to cooperate with this research their English knowledge was not the most appropriate for this research. For example, with the method of Loci, sometimes it was not possible to explain them some terms in English, so the teacher had to use the first language to give explanations about the new words.

Finally, the second one was the schedule, the English class was programmed on Friday, and sometimes the institution organized different events on this day. For this reason, three classes were lost during the treatment.

Due to the fact that there were only two limitations, the treatment was developed successfully; the afore mentioned was demonstrated in the results obtained, because the students learned the most of the words, and they increased their vocabulary in a long term memory what was the main objective in this research.

### Definition of Terms

*Declarative Memory:* a special type of long term memory that refers to memory for facts and events.

*Echoic Storage:* Auditory sensory registration

*Iconic Storage:* Visual sensory registration

*Keyword Method:* a mnemonic technique in which individuals form a native language-homophone (the keyword) for the target word in the second language. The individual then imagines a scene in which the homophone and the referent object of the target word are interacting in some manner. Memory retrieval of the meaning of the target word consists of recalling the homophone then recalling the imagined scene in which the homophone and the referent object are interacting.

*Long-Term Memory:* the store of information in memory that is retained over a long period. The capacity of long term memory to hold large amounts of information is probably unlimited. Information in long term memory is considered to be inactive until it is activated and manipulated in either short term or working memory.

*Method of Loci* is based upon associating the words students need to memorize with a path they know well and the items or landmarks they visualize.

*Mnemonic Techniques:* are specific memory enhancing techniques that provide the student with better ways of encoding information and make it easier to retrieve or remember this information. This is done by finding ways of relating new information to old information already existing in long-term memory.

*Procedural Memory:* Memory that refers to “how to” knowledge of procedures and skills such as driving a car and tying one’s shoes.

*Short-Term Memory:* the store of information that a person is aware of at any moment.

This type of memory holds modest amounts of information. Retention of new information can be aided by actively relating the new information to existing information in long term memory.

*Recall:* The spontaneous retrieval of material from LTM.

*Recognition:* memory for whether something currently perceived has been previously encountered or learned

*Rehearsal:* Repeating the information again and again

*Retrieval:* To bring the information back into STM or consciousness

*Schemas:* patterns of thought or organized knowledge structures that render the environment relatively predictable.

*Sensory Memory:* holds information about a perceived stimulus for a split second after the stimulus disappears, allowing a mental representation of it to remain in memory briefly for further processing

*Working Memory:* term used to denote the active use of cognitive procedures with new information that is in the process of being stored. It may also denote the active use of cognitive procedures in which information drawn from long term memory is associated with new information. Some theorists believe that working memory and short term memory are identical.



## CHAPTER 2: LITERATURE REVIEW

### Language and Thought

In this review of literature it has been taken into account the relationship between language and thought as essential components for successful development of language learning. In this way, Pinker (1994) notes that fossil evidence has indicated that Broca's area, the part of the human brain associated with language existed in hominids more than two million years ago, and many scientists believe that the capacity for symbol construction and language use developed from this time as the brain increased in size and complexity. Similarly, it is important to recognize that the origin of language has been linked to the development of consciousness. Vigotsky (1962) has asserted that thought and language are initially separated by become interdependent during acts of communication.

### Vocabulary and Memorization

As central research into this paper there are important questions concerning about the way in which words are learned. Teachers help learners with vocabulary implicitly or explicitly by means of word lists, paired translation equivalents and in variously related semantic sets. They also help learners by more implicit means such as exposure to words in the context of reading real texts. Nevertheless very few times teachers are conscious about what means to learn a word.

It is also worth considering that a definition of learning a word depends crucially on what learners mean by a word, but it also depends crucially on how a word is remembered, over what period of time and in what circumstances it can be recalled and whether learning a word also means that it is always retained.

Much work has therefore involved issues of memorization, and important questions had been raised concerning whether the storage of second language (L2) words involves different kinds of processing from the storage of first language (L1) words (Aitchison, 1994; Singleton, 1999).

According to Sternberg (1985) the high correlation found between tests of vocabulary and intelligence is essential, due to the fact that vocabulary tests are indirect measures of the ability to acquire new knowledge or the ability to infer meaning of unfamiliar words from contexts.

### Memory

At this point, it is primary to define memory, according to Myers (1999); memory is the persistence of learning over time through the storage and retrieval of information.

Memory is necessary for everything students do. Life without it would be meaningless. Learners would have no identity, no background or life history, no knowledge and no recognition. Memory involves taking something that students have observed, such as a written word and converting it into a form that students can store, retrieve and use. This will be described in more detail in the following pages of this research.

### Mental Representations

For a sound image or thought to return to mind when it is not longer present it has to be represented or coded in mind; but some kinds of representation are difficult to conceptualize and have received less attention from researchers. For example people store memories of *actions*, such as how to press the buttons on a phone or how to squeeze the last drops of ketchup out of the bottle; which suggests the existence of

*motoric representations*, or stored memories of muscle movements. The most commonly studied representations by psychologists are sensory and verbal.

#### *Sensory Representations*

It stores information in a sensory mode, such as the sound of a dog barking or the image of a city skyline.

#### *Visual Representations*

They are like pictures that can be mentally scrutinized or manipulated. (Kosslyn, 1983) “If asked, how many light fixtures are in your home? Most students could answer, despite never having counted, by forming a mental image of the rooms in their house and simply counting the fixtures as they travel mentally from room to room”.

#### *The Auditory Mode*

It is also important for encoding information (Thompson & Paivio, 1994). Some forms of auditory information would be difficult to represent in any other mode. For instance most readers would be able to retrieve pieces of Beethoven’s Fifth Symphony or “Ironic” by Alanis Morisset quite easily. In both cases, the representation that is retrieved is a series of patterned segments of sound, such as the *di-di-di-dah* that opens Beethoven’s Fifth. Other types of sensory information are *olfactory representations*, people can identify many objects, many smells which suggests that they are comparing current sensory experience with olfactory knowledge (Schab & Crowder, 1995).

#### *Verbal Representations*

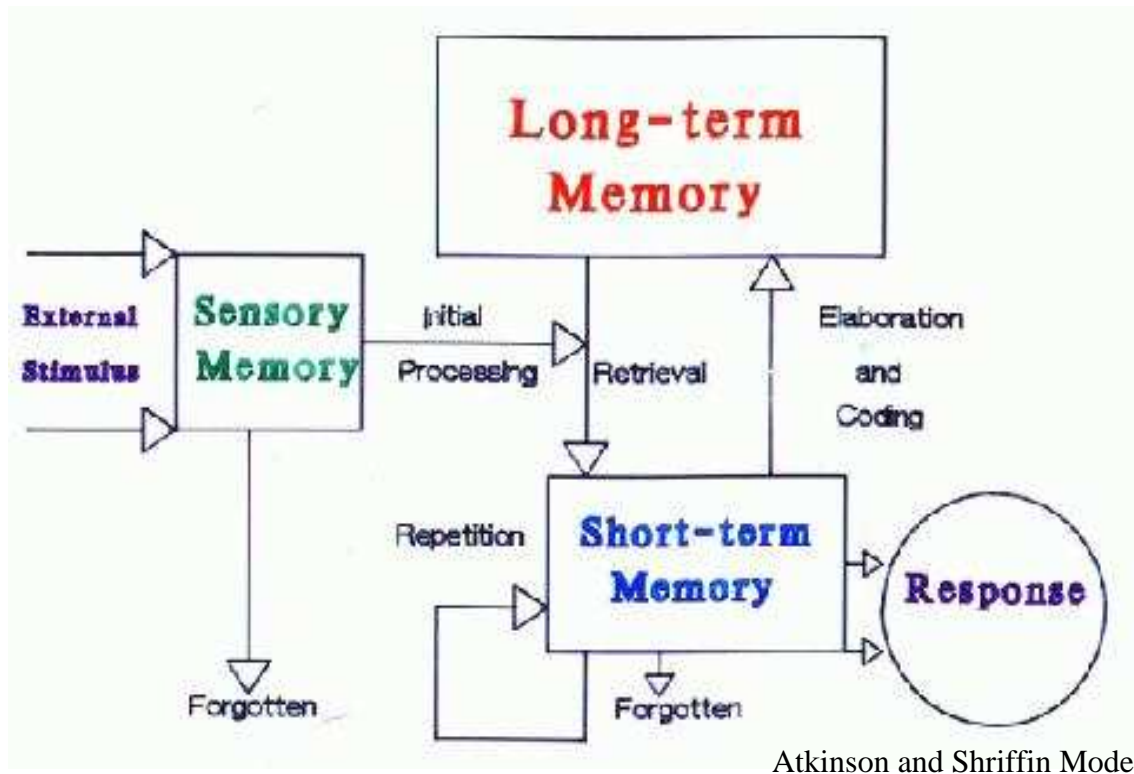
It is transcendent to point out that although many representations are stored in sensory modes many students think in words using verbal representations, For example it is impossible to imagine what “liberty” or “mental representation” mean without thinking in words.

### Information Processing

It is not possible to teach vocabulary in a long term memory without considering the information process that occurs into students' mind, to transfer the new knowledge into long term memory.

Information processing is a perspective (approach) to the study of cognition and cognitive development in which the mind is likened to a computer. The importance of this process is that it looks at the "*how*" information is processed and not just the "*how much*". Psychologists who adhere to this approach place specific emphasis on the processes of cognitive development. The comparison between the human brain and the computer includes the idea that the brain has a very large capacity to store information in the long term what is essential for this study.

The most widely accepted theory is labeled the "stage theory," based on the work of Atkinson and Shrifin (1968). The focus of this model is on how information is stored in memory; the model proposes that information is processed and stored in 3 stages. In this theory, information is thought to be processed in a serial, discontinuous manner as it moves from one stage to the next.



Atkinson and Shiffrin Model

### Sensory Memory

Sensory memory holds information about a perceived stimulus for a split second after the stimulus disappears, allowing a mental representation of it to remain in memory briefly for further processing (Sperling, 1960). The term “*iconic storage*” is used to describe visual sensory memory. For a brief period after an image disappears from vision, people retain a mental image (*or icon*) of what they have seen.

The auditory counterpart of iconic storage is called “*echoic storage*” (Battachi et al., 1981, Darwin et al., 1972; Neisser, 1967). Most teachers and students have probably had the experience of hearing a voice or a sound “echo” in their minds after the actual sound has stopped that is echoic storage (Myers, 1999, p.242). Information about the stimulus is passed then on to STM

### Short- Term Memory

Short term memory or working memory is a memory store that holds a small amount of information in consciousness for roughly 20 to 30 seconds, unless the person makes a deliberate effort to maintain it longer by repeating it over and over (Waugh & Norman, 1965).

Short term memory has limited capacity; that is it does not hold much information. On the average, people can remember about seven pieces of information at a time, with a normal range of from five to nine items (Miller, 1956). After 20 seconds the memory of these digits begins to fade or decay but it can probably still be retrieved by different means one of these is *rehearsal*.

Students can control the information stored in STM. For example after looking up a new word, most learners will repeat it over and over in their minds to prevent it from fading until they have memorized the word, a procedure known as *rehearsal*. This kind of rehearsal is known as maintenance rehearsal, since its purpose is to maintain information in STM.

Rehearsal is important in transferring information to long term memory, however maintenance rehearsal is not as useful for storing information in long term memory as more active thinking about the information; a procedure known as *elaborative rehearsal*. Remembering the words to a poem, for example is much easier if the person really understands, what it is about, rather than just committing each word to memory rote.

### Long Term Memory

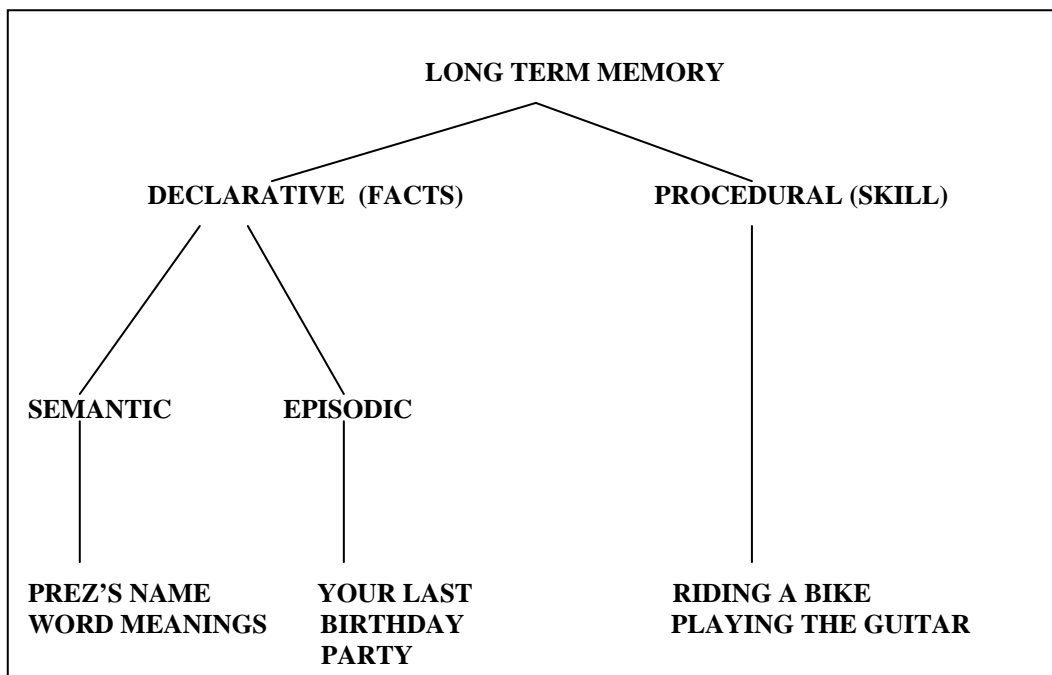
The most important information goes on to (LTM), where representations of facts, images, thoughts, feelings, skills, and experiences. Long-term memory acts as a

lasting storehouse for meaningful information. It contains everything you know about the world. It is thought to be unlimited and persist for a lifetime, this reflects the importance that students acquire long term memory because this process could be similar as when a person remembers a specific event that happened when he was a small child, for example learning to ride a bicycle, it is considered this as part of long-term memory, so it would be easier for students to remember the information like for children to ride a bicycle when he wants or needs it.

Recovering information from long term memory is known as *retrieval*, and it involves bringing it back into STM (which is often used in information processing models as a synonym for consciousness).

#### Varieties of Long Term Memory

There are two types of long-term memory: *declarative* memory and *procedural* memory



### *Declarative Memory*

It refers to memory for facts and events, much of which can be conscious, stated or declared. (Squire, 1986), when you as a teacher think of memory, you usually mean declarative memory; this memory can be *semantic* or *episodic*. (Tulving 1972, 1987).

#### *Semantic Memory (or generic memory)*

It is relevant because it refers to general world knowledge or facts, such as the knowledge that Pasto is cold or that NaCl is the chemical formula for salt. The term is somewhat misleading because semantic implies that general knowledge is store in words, whereas people knows many things about objects, such as their color or smell that are encoded as sensory representations. (For this reason, some psychologists now refer to it as generic memory.)

#### *Episodic Memory*

Equally episodic memory plays a very important role in information possessing and the development of lexical competence because it consists of memories of particular events; it allows students to travel mentally through time to remember thoughts and feelings, it is often *autobiographical* and it is closely linked to semantic memory.

#### *Procedural Memory*

It is also known as memory for motor skills and behavioral habits. One of the skills that use this type of memory is typing. Once people learned it they will not find any difficulty doing. People are often astonish to find that even though they have not rode a bike for many years, the skills are reactivated easily, almost as their use had never been interrupted.



## Explicit and Implicit Memory

### *Explicit memory*

It involves the conscious retrieval of information. Researchers distinguish between two kinds of explicit retrieval: Recall and recognition. Recall is the spontaneous conscious recollection of material from LTM, and recognition refers to the explicit feeling or remembrance that something currently perceived has been previously encountered.

### *Implicit Memory*

It refers to memory that is expressed in behavior, it is evident in skills, conditioned learning and associative memory (that is associations between one representation and another).

At this point it is primary to clarify that some psychologists use explicit and implicit memory as synonyms for declarative and procedural memory. Although the terms clearly overlap, the declarative / procedural dichotomy refers more to the type of knowledge stored (facts versus skills), whereas explicit and implicit distinction refers more to the way this knowledge is retrieved and expressed.

## Encoding and Organization of Long Term Memory

The significance of encoding and organization is that for information to be retrievable from students' memory it must be encoded or cast into a representational form or "code"; basically, encoding refers to translating incoming information into a mental representation that can be stored in memory. Students can encode the same information in a number of different ways. For example, they can encode information according to its sound (acoustic code), what it looks like (visual code), or what it means (semantic code). Some encoding is deliberate studying for an exam, learning lines for a

play, or trying to remember a joke. However much of the time encoding simple occurs as a by product of thought and perception, which is why people can remember incidents that happened to them ten years ago even though they were not trying to commit them to memory.

In daily life, students encode information into LTM because they need to for one reason or another, the information or event encoded as a product of thought and perception is usually meaningful, emotionally significant, and similarly, it is typically remembered for a purpose, to achieve some goal or to accomplish their needs.

When the new information or event represent something important to the students such as an event that caused impression to them or the new words are related such as “*police officer*” and “*oficial de policia*” the students’ memorization is improved significantly as they recognize the link between them and can use the memory of one to cue the memory of the other from LTM, the afore mentioned activates the students’ prior knowledge facilitating the storage and retrieval of information and at same time developing their thought, fantasy and wish to learn.

### Levels of Processing

#### *Deep and Shallow Processing*

The degree to which information is elaborated, reflects upon and processed in a meaningful way during memory storage is referred to as the depth or level of processing ( Craik & Lockhart, 1972) students can encode information at a shallow structural level, at a deeper phonemic level or a deepest semantic level. Processing material deeply means paying attention to its meaning or significance.

### *The Encoding Specificity*

Subsequent research has shown the best encoding strategy depends on what the person later needs to retrieve (Anderson, 1995).

### *Context and Retrieval*

The context in which people encode and retrieve information can affect the ease of retrieval. Retrieval is the process of actually remembering something when the teacher or the students want to. The more ways information has been encoded, the more ways there are for retrieving it.

## Mnemonic Techniques

The principles of encoding afore mentioned help explain the utility of mnemonic techniques; they are more specific memory aids for remembering information. (named after the Greek word “mneme”, which means “memory”). Mnemonic techniques are specific memory enhancing techniques that provide the student with better ways of encoding information and make it easier to retrieve or remember this information. This is done by finding ways of relating new information to old information already existing in long-term memory. So, to consider the following techniques that can be used to facilitate such memorization is significant for both teachers and learners.

### *Rhymes and Songs*

Rhythm, repetition, melody, and rhyme can all aid memory. That is why it is so remarkable to realize that in classroom. What was said previously has been demonstrated by many ancient Greek stories that were told by storytellers who would rely solely on their memories. The use of rhyme, rhythm, and repetition helped the storytellers remember them.

*Method of Loci*

This technique was used by ancient orators to remember speeches, and it combines the use of organization, visual memory, and association. Before using the technique, it must be identified a common path in which students walk. This can be the walk from their dorm to class, a walk around their house, whatever is familiar. What is essential is that they have a vivid visual memory of the path and objects along it. Once it has been determined the path, they have to imagine themselves walking along it, and identifying specific landmarks that they will pass. For example, the first landmark on their walk to campus could be their dorm room, next may be the front of the residence hall, next a familiar statue they pass, and so forth. The number of landmarks they choose will depend on the number of things they want to remember.

Students do not have to limit this to a path. They can use the same type of technique with just about any visual image that they can divide into specific sections. The most important thing is that they use something with which they are very familiar.

*Keyword Method*

Anderson (1980) suggests that verbal – imagery linkages maybe useful in learning vocabulary as in the keyword method. The keyword method is common in second language vocabulary learning and is used by developing an English- language homophone for the second language vocabulary word. For example “cart” for the Spanish word “carta” or letter and imagining some meaningful interaction between the two that is linked to the meaning to the second language word. The keyword method has been found to be successful for these kinds of materials in foreign language learning (Atkinson and Raugh, 1975; Pressley et al. 1981)

*Practice Makes Perfect*

It may not be a mnemonic, but this research considers that repeating is still a great memory aid. Remember the children's game "I'm going on a picnic and I'm bringing...." As each new object is added, the old objects are repeated. Students can often remember a large number of objects this way. When remembering a list of things, it is possible to try a similar concept. Once a learner is able to remember five items on his or her list without looking, add a sixth, repeat the whole list from the start, add a seventh, and so on. It can be quite intimidating to see long lists, passages, or equations that someone is expected to commit to memory. Break up the information into small bits that can be learnt, one step at a time, and it may be surprised at how easy it can be. Students might even utilize grouping techniques, to form meaningful groups that can be learnt one at a time.

Furthermore, recitation forces learners to practice retrieving information. For example when they are reading a book, they should stop and try to remember what have they just read, or explain it in their own words.

So, memory is a very important and complex issue. English learners who have a weak memory should do everything on their own to improve it. Those whose memory is good and strong should never take it for granted because nobody knows when he or she might lose it. Without memory life would be totally different and much stranger. People would not recognize friends and family.

## Networks of Association

One of the reasons mnemonics are effective is that they connect information with information already stored and organized in memory. This makes the new information easier to access because a trail blazed in neural woods by prior knowledge can be easily

spotted than a new barely worn path. As William James proposed over a century ago (1890, p.662).

Long-term knowledge is stored in networks of association, ideas that are mentally connected with one another by repeatedly occurring together. Each piece of information along a network is called a node. Nodes may be thoughts, images, prepositions, smells, tastes, memories, emotions, or any other piece of information.

A node may be nothing more a set of neurons distributed throughout the brain that, when they fire together represent an object or category such as a dog, integrating visual, tactile, auditory, verbal, and other information stored in memory.

#### *Spreading Activation*

According to (Collins & Loftus, 1975) activating one node in a network triggers activation in closely related nodes.

#### *Hierarchical Organization of Information*

Some parts of networks are organized hierarchically with broad categories and composed narrowed subcategories which in turn consist or even more specific categories.

#### Schemas

Another way psychologists describe the organization of LTM is in terms of *schemas*. Schemas are patterns of thoughts, or organized knowledge structures that render the environment relatively predictable. When students go into a classroom on a first day of a class and a person resembling a professor begins to lecture they listen and take notes in a routine fashion. They are not surprised that one person has assumed control of the situation and begins talking because they have a schema for events that normally transpire in a classroom.

Schemas affect the way people remember into two ways by influencing the information they encode and by shaping the way they reconstruct data that they have already stored. (Rumelhart, 1980) schemas influence both the way information is encoded and the way information is retrieved.

### Retention and Language Loss

Research on language attrition indicates that both the initial competence gained in a second language and the amount of subsequent practice opportunities affect and are fundamental in how much of the language is lost or retained over time by students (Lambert and Moore, 1984; Oxford, 1982).

In conclusion, a cognitive theory of vocabulary acquisition is interesting because it would predict that aspects of the language that are at the first or cognitive stages or skills acquisition and are therefore represented by declarative knowledge would be forgotten first, whereas those aspects of the language that have become automatic or proceduralized would be retained. To apply the mnemonic strategies and the information processing theory is also central because it predicts that retrieval of words from long term memory not only depends on the quantity of information that teachers transmit in classroom but also on the quality and depth of processing. The general implication is that the way in which information was learned and is represented in students' mind will influence verbal vocabulary retention what is essential for teachers to develop lexical competence.

## CHAPTER 3: METHOD

## Design of the study

For the implementation of some mnemonic techniques to improve long-term memory in vocabulary, it was selected an experimental research, the design applied in order to carry out it was intact group. This design requires two groups, one was the experimental group, and the other was the control group. A pre-test was carried out in both groups. After the pre-test the treatment (mnemonic techniques) was applied to the experimental group for a period of six months. Finally a post-test was carried out in both groups in order to compare the results obtained in the pre-test and the post-test and both the control and experimental groups.

G1 T1 X T2  
G2 T1 T2

G1 Group 1

G2 Group 2

T1 Pre-test

T2 Post-test

X Treatment : Mnemonic Techniques

## Subjects

This research was carried out in Institución Educativa Municipal Santa Barbara in Pasto. The subjects that were selected for this research were two groups of 30 students of fifth grade, their ages ranged from ten to thirteen years old, with a medium low socioeconomic status.

## Materials

The materials were selected and adapted taking into account the students' contexts, interests, levels, background and needs. Materials such as pictures, drawings, songs,



wallpapers, flashcards, were used as tools that permitted to maintain the students' interest during the development of each session class, and at the same time were facilitators that helped the teacher to attain the main objective of this study.

#### Instruments

In order to collect the information, a pre-test was applied to gather information. This test consisted of ten multiple choice and completion questions. Students were expected to select the right answer of four options. The pre- test and post-test were applied in both experimental and control group. After the treatment the post- test was applied to identify the improvement of long-term memory in vocabulary. This post-test permitted to obtain more sense about the pros and cons of the treatment, and it helped to find differences between the two groups in this pre- experimental research. Both the pre-test and post- test had the same procedure and content when they were applied.

#### Procedure

Two groups of 30 students were selected. The first group was considered as the experimental where mnemonic techniques were applied; the second group functions as the control group, where traditional techniques were applied.

To perform the teaching sessions, twenty- nine activities were developed, each activity were specially designed to include mnemonic techniques (method of loci, keyword and rhythms and songs). To implement mnemonic techniques in a session class they were considered nine steps:

*Step1: Sensory reception.* As a first step the teacher review the previous topic and then he uses auditory (rhythms and songs) and visual input (flashcards, pictures, drawings and wallpapers.) were received by the students. The teacher tried to motivate the students using different warm up activities with the purpose of obtaining more attention and motivation from the students.

*Step 2: Selective perception.* When the teacher observes that the students are already paying attention and consciously focused on the picture or rhythm; the new topic is introduced. This part depends on the mnemonic technique selected by the teacher. In this case, the teacher was working with rhythms and songs, depending on the topic the teacher can implement the rhythms of song such as "Frere Jacques", "Twinkle, Twinkle" or "London Bridge" to remember or learning topics such as the alphabet, in fact, many children learn the letters of the alphabet from the tune of "Twinkle, Twinkle, Little Star.". Representing sounds in memory helps to remember new language information according to each sound using spelling accent marks and rhymes.

*Step 3: Short- term memory.* The new information enters consciously into short-term memory. At this step, the teacher used all his or her creativity to introduce the new topic, making special emphasis on the main ideas of the topic, because the teacher has to give the students the opportunity of making a clear idea of the new topic. Then the teacher can introduce for example, the method of Loci; the teacher uses a common path that students are familiar with and introduce the new vocabulary. The teacher encourages the students to imagine or think about this place and once the students have visualized and recalled each location readily, the teacher creates visual images of the new words associated with one of the locations; now, the teacher knows that it is time to relate new language information to concepts already in memory or relate some information to another to create new associations on memory.

*Step 4: Long- term memory.* After the students have entered the information into short –term memory, if the new topic is interesting and has been clearly presented by the teacher, it is appropriate to place new words into a context, in other words to put a word in a meaningful sentence, conversation or story in order to remember it. In this way information goes into long- term memory.

*Step 5: Storage in Long- term memory.* Once the information is already in long-term memory, the students store this information in their minds; this is easily observed when the teacher realizes that his or her students can often recall words that have been taught and they begin to repeat the words freely without fear of committing mistakes using the new information that they have memorized. Nevertheless, bearing in mind personal experience, it is important to clarify that the storage in long- term memory only can be confirmed with the time, because sometimes to assume that students are going to remember everything that teacher exposes in only one session class is not adequate. Taking into account this aspect it is transcendental to apply the following step.

*Step 6: Reviewing and reinforcing new language information*

The new language information has to be studied and practiced frequently to be remembered. Considering the experience given in the application of this procedure the teacher begins to observe that at this step, students realize the meaning of the new word, and make a comparison between his or her existing linguistic knowledge, and the newly processed input, so to implement activities or strategies that help to review or reinforce the new word is important to obtain that the new information can be internalized in students' mind and become more automatic, natural and familiar to the students.

For example with the keyword method the teacher can use a word that students have previously studied, one example is *bear* and the new word could be *barrister*, (another word for lawyer). To remember what a barrister is, the teacher first guides the students to think of the keyword for barrister: *bear*, asking or making explanations that lead the students to associate the existing knowledge “bear” and the new word “barrister”. Now the teacher shows a picture and motivates the students to look at the bear acting like a lawyer. Finally the instructor makes some questions such as the following:

the bear is the keyword for . . ? [barrister] Barrister, good. So remember this picture of a bear acting like a lawyer. When you hear the word **barrister**, you first think of the keyword. . ? [bear] Good, and remember what the bear is doing in the picture? [being a lawyer] Right, being a lawyer. So what does **barrister** mean? [lawyer] Lawyer, good. This is only an example, because there are many examples that can be observed in the appendix section of this research, but the teacher is completely autonomous to select the most adequate activity or example according to his or her topic. The most important is to obtain that the students practice and remember the new information in spaced intervals of time.

*Step 7. Retrieval from long term memory and output.* Retrieval of words from long- term memory not only depends on the quantity of information that teachers transmit in classroom but also on the quality and depth of processing, so at this step it is transcendental that the teacher takes into account that the way in which information is learned and is represented in students' mind will influence vocabulary retention what is essential for teachers to develop lexical competence. Similarly it is important to recognize that subsequent practice activities will be helpful at this time. The improvement of performance is related to the amount of students' practice of the new vocabulary.

*Step 8. Feedback.* The teachers have to assess the students at the end of each session class preparing some activities that can be helpful, and at the same time, to reinforce the new knowledge such as brainstorming, games, jokes, discussions, debates, problem solving activities and so forth. The students test hypothesis in two main ways: receptively by comparing input to existing interlanguage, and productively by producing utterances in the target language and assessing their correctness from the feedback received.(Fotos, 2000).

## Variables

### *Independent variable*

The effect of mnemonic techniques

### *Dependent variable*

Long- term memory in vocabulary

## Data Analysis

This pre- experimental study used a quantitative and qualitative analysis of results. It used a descriptive statistics to determine the level and the differences found in both groups to obtain the quantitative information. The second aspect, qualitative analysis was determined using all the information collected in class; the behavior, participation, attention and interest demonstrated by the students through the development of this study.

A test was applied before the application of the treatment; this test was the pre-test the other test was applied at the end of the treatment and this test was the post- test. The pre and post- tests contained the same information and questions, each question had multiple choice and some pictures related with vocabulary. It is important to say that only one of the four options was the correct one.

CHAPTER 4: RESULTS

In this research two groups of 30 students were chosen with the purpose of analyzing their level of vocabulary. One group was selected as the control group and the other one as the experimental group. The results of the pre- test and the post-test were analyzed through a matrix of data. It was made with the objective of illustrating the results of each student in the different questions, in both groups experimental (5- 2) and control group (5- 1). This was an excellent form to corroborate the data which took into account the quantity of the right answers given by the students. Table 1 represents the results obtained in the pre-test

Table 1. Pre –Test Results

Data Matrix (Experimental Group)

Questions

	1	2	3	4	5	6	7	8	9	10	I
1	I	O	O	I	I	I	I	I	I	I	8
2	I	I	O	O	O	I	I	I	O	I	6
3	O	I	I	I	O	O	O	I	I	I	6
4	I	O	I	O	I	I	I	O	O	I	6
5	O	O	I	I	I	I	I	O	O	O	5
6	O	I	I	O	I	I	I	O	O	O	5
7	I	O	I	O	I	I	I	O	O	O	5
8	I	O	O	O	I	I	I	I	O	O	5
9	O	I	O	O	O	I	I	I	I	O	5
10	I	O	O	O	O	I	I	I	I	O	5
11	O	I	I	I	O	O	O	O	O	I	4
12	O	O	I	I	I	O	I	O	O	O	4
13	O	O	O	O	O	I	O	I	I	I	4
14	I	O	I	O	O	O	O	I	I	O	4
15	O	O	O	O	I	O	I	O	I	O	3
16	I	O	O	O	O	O	O	I	I	O	3
17	I	O	I	O	O	O	O	O	I	O	3
18	O	O	O	O	I	I	I	O	O	O	3
19	O	O	O	O	O	I	O	I	O	I	3
20	O	O	I	I	O	O	O	O	O	I	3
21	I	O	O	O	O	O	O	I	O	I	3
22	O	O	O	I	I	O	I	O	O	O	3
23	I	O	I	O	I	O	O	O	O	O	3
24	I	O	O	O	O	O	O	I	I	O	3
25	O	O	O	O	O	O	I	O	I	O	2
26	O	O	O	O	I	O	O	O	O	I	2
27	O	O	O	I	O	O	O	O	O	I	2
28	O	O	O	I	O	O	O	O	O	O	1
29	O	O	O	O	O	O	O	O	O	I	1
30	O	O	O	O	O	I	O	O	O	O	1
I	12	5	11	9	12	13	14	12	11	12	111

Total right answers

Students were located at the first column. The answers were located in the first row. The right answers were represented by “I” and the wrong answers were represented by “O”. At the end of the questions column, there was located the total of right answers for each student.

Table 2.Pre Test Results

## Data Matrix (Control Group)

## Questions

	1	2	3	4	5	6	7	8	9	10	I
1	I	I	I	I	O	I	I	I	I	I	9
2	I	O	I	O	I	I	I	O	O	I	6
3	O	O	I	I	I	I	I	O	O	O	5
4	I	I	O	O	I	O	O	I	I	O	5
5	O	O	I	O	I	O	O	I	I	I	5
6	I	O	O	I	I	O	I	I	O	O	5
7	I	I	O	O	I	I	O	O	O	I	5
8	O	I	O	I	O	I	I	O	I	O	5
9	I	O	O	O	O	I	O	O	I	I	4
10	O	I	O	O	I	O	O	I	O	I	4
11	O	I	I	O	I	O	I	O	O	O	4
12	O	I	I	O	I	O	O	O	I	O	4
13	I	O	O	O	I	O	O	O	O	I	3
14	O	O	O	O	I	I	O	O	O	I	3
15	I	O	O	O	O	I	O	O	I	O	3
16	I	O	O	I	O	O	O	O	O	I	3
17	O	O	O	O	O	I	O	I	O	I	3
18	O	I	I	O	O	O	I	O	O	O	3
19	O	O	O	I	O	O	O	I	O	I	3
20	I	O	I	O	O	O	O	I	O	O	3
21	I	O	O	I	I	O	O	O	O	O	3
22	O	O	O	I	O	O	O	O	I	O	2
23	O	O	O	O	I	I	O	O	O	O	2
24	O	O	O	O	O	O	I	O	I	O	2
25	O	O	O	O	O	I	O	O	O	I	2
26	O	O	I	O	O	O	O	O	I	O	2
27	I	O	O	O	O	O	O	I	O	O	2
28	O	O	I	O	O	O	O	O	O	I	2
29	O	O	O	O	O	O	O	I	O	O	1
30	O	O	O	O	O	O	O	I	O	O	1
I	12	8	10	8	13	11	8	11	10	13	104

Total right answers

The results of the pre-test indicate that in both groups the experimental (5- 2 grade) and control group (5- 1 grade) the most common score (mode) was 3. It can be seen that in the experimental group the average of right answers (mean) was 3, 7 and in the control group was of 3, 4. The highest score in the experimental group was 8 while

in the control group was 9, and the lowest score in both groups was 1. It was established a range of 7 in the experimental group and 8 in the control group, with a standard deviation of 1,6 in the experimental group and 0,8 in the control group. In the following table is demonstrated the previous information

Table 3. Pre- Tests Results (Experimental and Control Groups)

Pre-Test

	Experimental Group	Control Group
Most common score	3	3
Average of right answers	3,7	3,4
Range	7	8
Highest score	8	9
Lowest score	1	1
Standard deviation	1,64	1.65

With the purpose of exemplify the information given in table 1, figure 1 and 2 show clearly the results of the pretest in each group. (Experimental and Control group)



Experimental Group

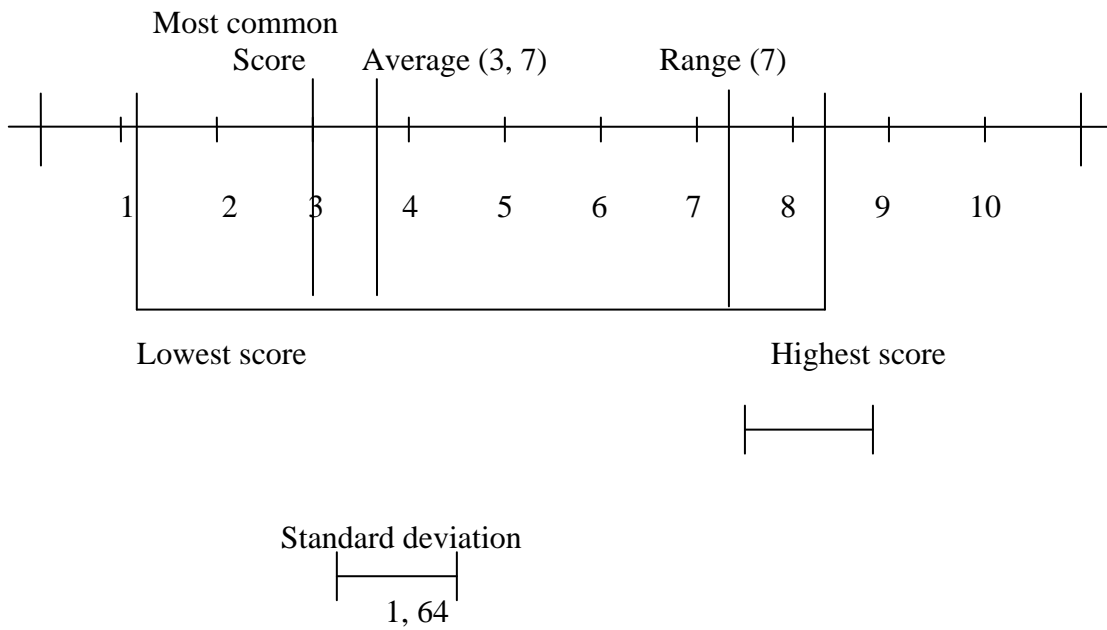


Figure 1. Pre-test results (Experimental Group)

Control Group

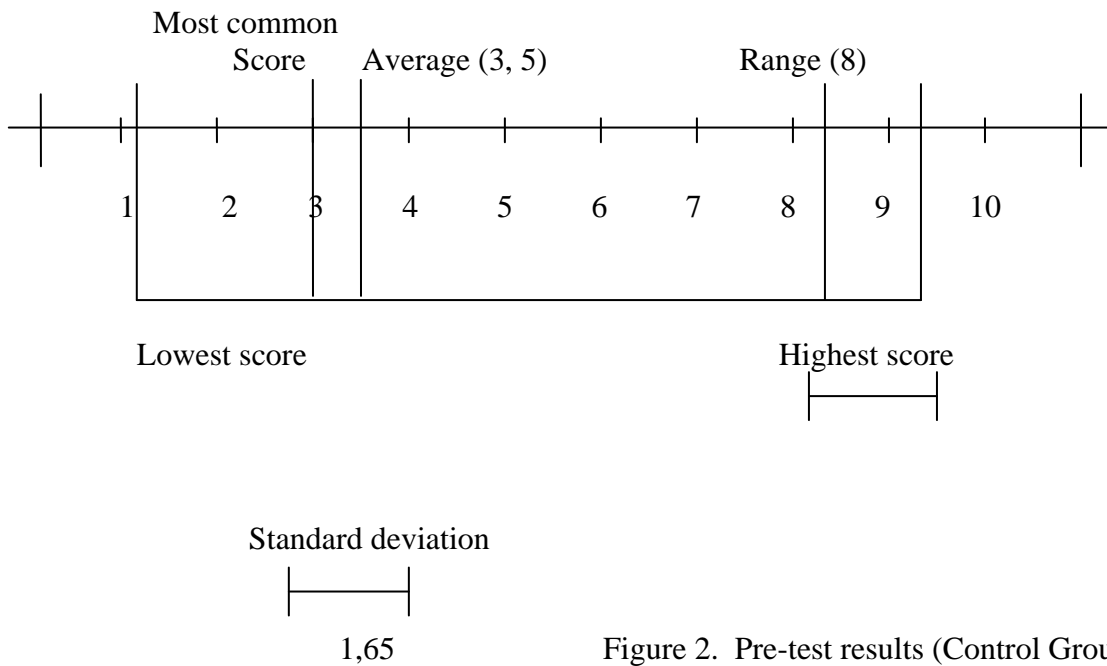


Figure 2. Pre-test results (Control Group)

## Pre-Test Results

The results of the pre-test represented in table No. 2 showed that in both groups experimental and control groups, seven different frequencies were found; the highest frequency correspond to the score of eight in the experimental group and nine in the control group, and only one student had obtained the highest punctuation in both groups. Then a frequency of three was found in the experimental group with a score of six, in contrast in the control group a frequency of one student with a score of six. In the experimental group six students attained a score of five; equally in the control group six students got a score of five. In table 2 it can be observed that in the experimental as well as the control group showed similar frequencies four students obtained a score of four.

Ten students got a score of three in the experimental group and nine students got a score of three in the control group. A frequency of 3 students had a score of two in the experimental group and a frequency of 7 students had a score of two in the control group. Finally the lowest score of one was corresponded to three students in the experimental group and two students in the control group. As it is notable in table 2 most of the students did not get good results in the pretest, they mainly got low results. Although the students were willing to cooperate in the pre-test, their low results can be observed in the following table

Table 4. Pre-test Frequencies

Frequencies			
Experimental Group	Score	Control Group	Score
1	8	1	9
3	6	1	6
6	5	6	5
4	4	4	4
10	3	9	3
3	2	7	2
3	1	2	1

In the figure 3 it can be seen graphically the frequencies and scores of the pre-test in both groups.

## Pre- test Control and Experimental Group

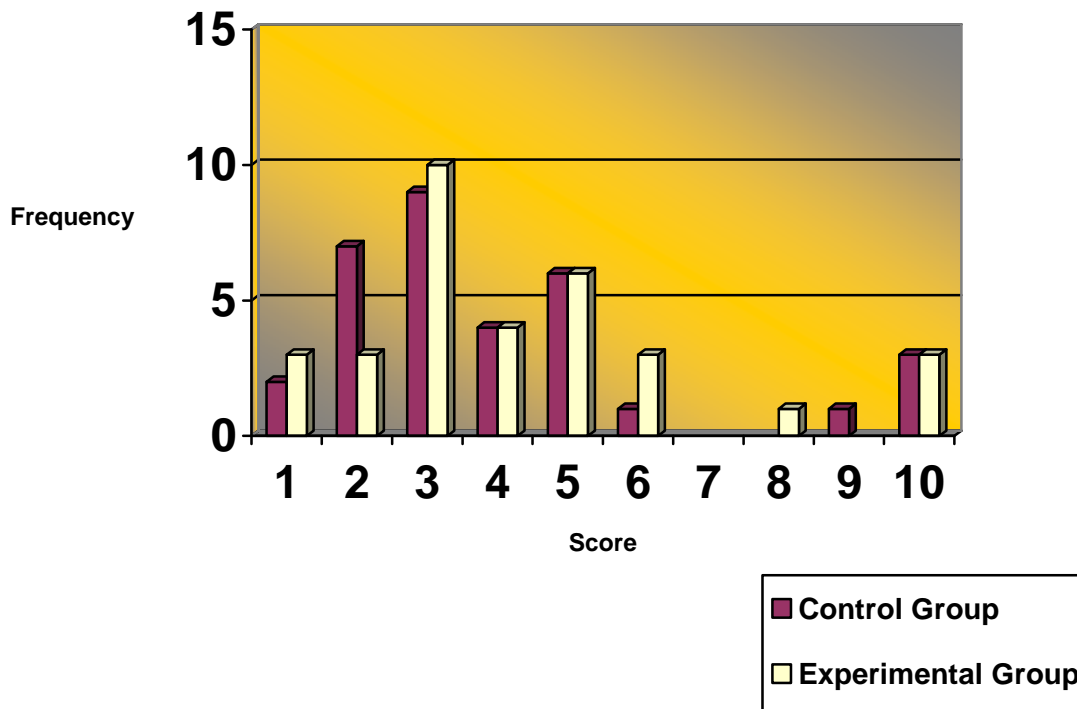


Figure 3. Parallel Pre-test Control and Experimental Group

Figure3. The frequencies and scores based on the results of the pre-test. It can be said that in the experimental group 13% of the students passed the test and 87% failed it, while in the control group 7% passed the test and 93% failed it. The results indicate that the two groups did not have an acceptable level of lexical competence.

Figure 4. Demonstrates the percentages.

Pre-Test Percentages

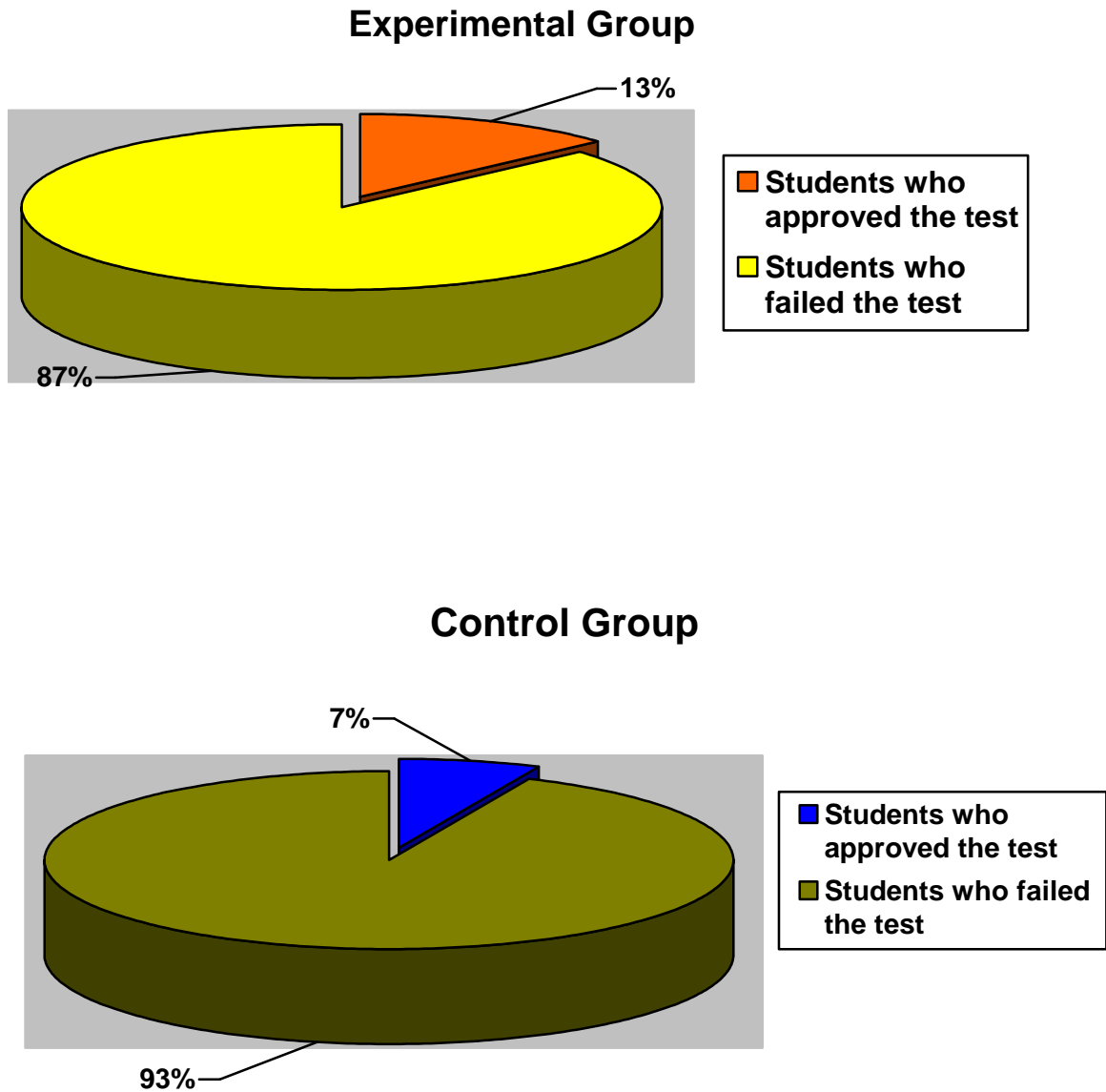


Figure 4. Pre-test percentage (Experimental and Control Group)

Post -Test

After six months of treatment it was applied the post- test, obtaining the following information. Table 5 summarizes the results found from the post test that the students took once they had already taken the treatment. It can be observed the right answers that each student got in the different questions, in both groups experimental (5- 2) and control group (5- 1). These results are important to analyze to find the differences between the pre- test and the post- test.

This information can be seen in table 5 and 6.

Table 5 . Post Test Results Experimental Group

Data Matrix

	1	2	3	4	5	6	7	8	9	10	I
1	I	I	I	I	I	I	I	I	I	I	10
2	I	I	I	I	I	I	I	I	I	I	10
3	I	I	I	I	I	I	I	I	I	I	10
4	I	I	I	I	I	I	I	I	I	I	10
5	I	I	I	I	I	I	I	I	I	I	10
6	I	I	I	I	I	I	I	I	I	I	10
7	I	I	I	I	I	I	I	I	I	I	10
8	I	I	I	I	I	I	I	I	I	I	10
9	I	I	I	I	I	I	I	I	I	I	10
10	I	I	I	I	I	I	I	I	I	I	10
11	I	I	I	I	I	I	I	I	I	I	10
12	I	I	I	I	I	I	I	I	I	I	10
13	I	I	I	I	I	I	I	I	I	I	10
14	I	I	I	I	I	I	I	I	I	I	10
15	I	I	I	I	I	I	I	I	I	I	10
16	I	I	I	I	I	O	I	I	I	I	9
17	I	I	I	I	I	O	I	I	I	I	9
18	I	O	I	I	I	I	I	I	I	I	9
19	I	I	I	I	I	I	O	I	I	I	9
20	I	I	I	I	I	I	O	I	I	I	9
21	I	O	I	I	I	I	I	I	I	I	9
22	I	I	I	I	I	O	I	O	I	I	8
23	I	O	I	I	I	O	I	I	I	I	8
24	I	O	O	I	I	I	I	I	I	I	8
25	I	O	O	I	I	I	I	I	I	I	8
26	I	I	I	O	I	O	I	I	I	I	8
27	I	I	O	I	O	O	I	I	I	I	7
28	I	I	O	I	O	O	I	I	I	I	7
29	I	I	I	I	O	I	O	I	O	I	7
30	I	O	O	I	O	I	O	O	I	I	5
I	30	24	25	29	26	23	26	28	29	30	270

The results on this table can lead to say that the students got a better outcome in the post-test. Their most evident improvement is distinguished in the total of right answers given by the students. In the experimental group the results of the pre- test showed a total of 111 and in the control group was of 104. In contrast, the results of the post- test illustrate a total of 270 right answers in the experimental group and 165 in the control group.

In table 6 it can be observed the results of the control group.

Table.6 Post Test Results Control Group

Data Matrix

	1	2	3	4	5	6	7	8	9	10	I
1	I	I	I	I	I	I	I	I	I	I	10
2	I	I	I	I	I	I	I	I	I	I	10
3	I	I	I	I	I	I	I	I	O	I	9
4	I	I	I	I	I	I	O	I	I	O	8
5	O	I	I	I	I	I	O	I	I	I	8
6	I	O	O	I	I	I	I	I	I	O	7
7	I	I	I	O	I	I	O	O	I	I	7
8	O	I	O	I	O	I	I	I	I	O	6
9	I	O	O	O	I	I	I	O	I	I	6
10	O	I	O	O	I	I	I	I	O	I	6
11	I	I	I	O	I	O	I	O	I	O	6
12	I	I	I	I	I	O	O	O	I	O	6
13	I	I	O	O	I	O	O	O	I	I	5
14	I	I	O	O	I	I	O	O	O	I	5
15	I	I	I	O	O	I	O	O	I	O	5
16	I	I	I	I	O	O	O	O	O	I	5
17	I	I	O	O	O	I	O	I	O	I	5
18	O	I	I	I	O	O	I	O	O	I	5
19	I	I	O	I	O	O	O	I	O	I	5
20	I	I	I	O	O	I	O	I	O	O	5
21	I	O	O	I	I	I	I	O	O	O	5
22	O	I	O	I	O	O	I	I	I	O	5
23	O	O	O	I	I	I	O	I	I	O	5
24	O	O	O	I	I	O	I	O	I	O	4
25	O	O	O	I	O	I	I	O	O	I	4
26	O	I	I	O	O	O	O	O	I	I	4
27	I	O	O	O	O	O	O	I	I	O	3
28	O	O	I	O	O	O	I	O	O	I	3
29	I	O	O	O	O	O	O	I	O	O	2
30	O	O	O	O	O	O	O	I	O	O	1
I	19	20	14	16	16	17	14	16	17	16	165

The post-test indicates that in the experimental (5- 2 grade) the most common score(mode), was 3 in the pre-test and 10 in the post test while in the control group (5- 1 grade) the most common score was 3 in the pre-test and 5 in the post-test.

It can be seen that the average of right answers in the experimental group was 3,7 in the pre-test and 9 in the post test, while the average of right answers in the control group was 3,4 in the pre-test and 5,5 in the post-test. It was established a range in the experimental group of 7 in the pre-test, and 5 in the post test.; on the other hand, the range in the control group was 8 in the pre-test and 9 in the post test.

An important aspect to take into account in order to see the improvement in the post test is the highest score; the highest score in the experimental group was 8 in the pre-test and 10 in the post test. In contrast, in the control group, the highest score was 9 in the pretest and 10 in the post test.

The lowest score in the experimental group was 1 in the pre-test and 5 in the post test; while, the lowest score in the control group was 1 in the pre-test and there were not changes in the post test.

The sample in the post test demonstrated to be more homogeneous than in the pre test, this was analyzed by means of the standard deviation which in the post test was lower (1.2) than the standard deviation of the pretest (1, 6). Taking into account the previous information, it could be said that the results of the post- test were guided more toward the positive part of the scale and the level of lexical competence of the students improved in both groups; although, it is important to clarify that the experimental group demonstrated a better performance than the control group.

The difference between both groups has been clearly demonstrated, the treatment with mnemonic techniques was more effective to increase lexical competence than the

traditional ones. And the most important for this research was to corroborate that it is possible to teach vocabulary to be remembered for a long term.

Table 7. Parallel between the pre-test and post-test in both groups.

	Pre-test		Post-Test	
	Experimental Group	Control Group	Experimental Group	Control Group
Most common score	3	3	10	5
Average of right answers	3, 7	3, 4	9	5, 5
Range	7	8	5	9
Highest score	8	9	10	10
Lowest score	1	1	5	1
Standard deviation	1, 64	1.65	1.26	2.04

With the purpose of illustrate better the difference between both groups in the post-test, figure 5 and 6 show clearly the results of each group. (Experimental and Control group)



Figure 5. Post-test Experimental Group Results

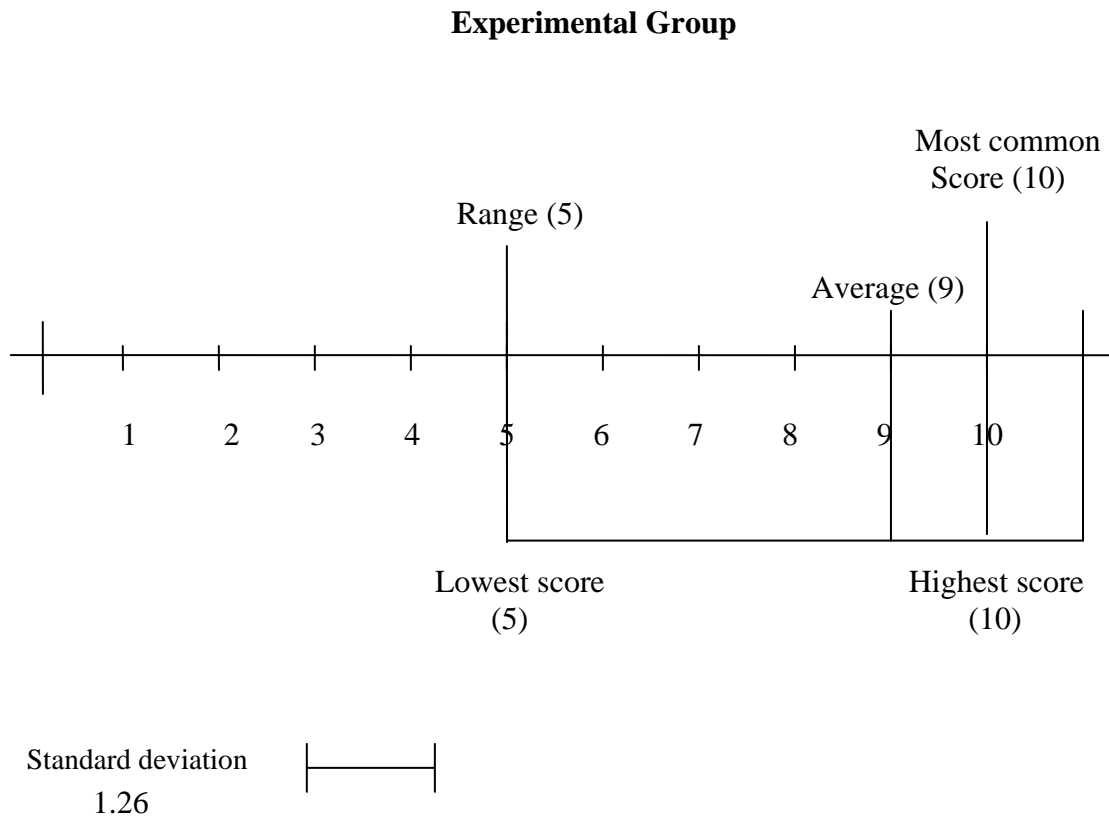
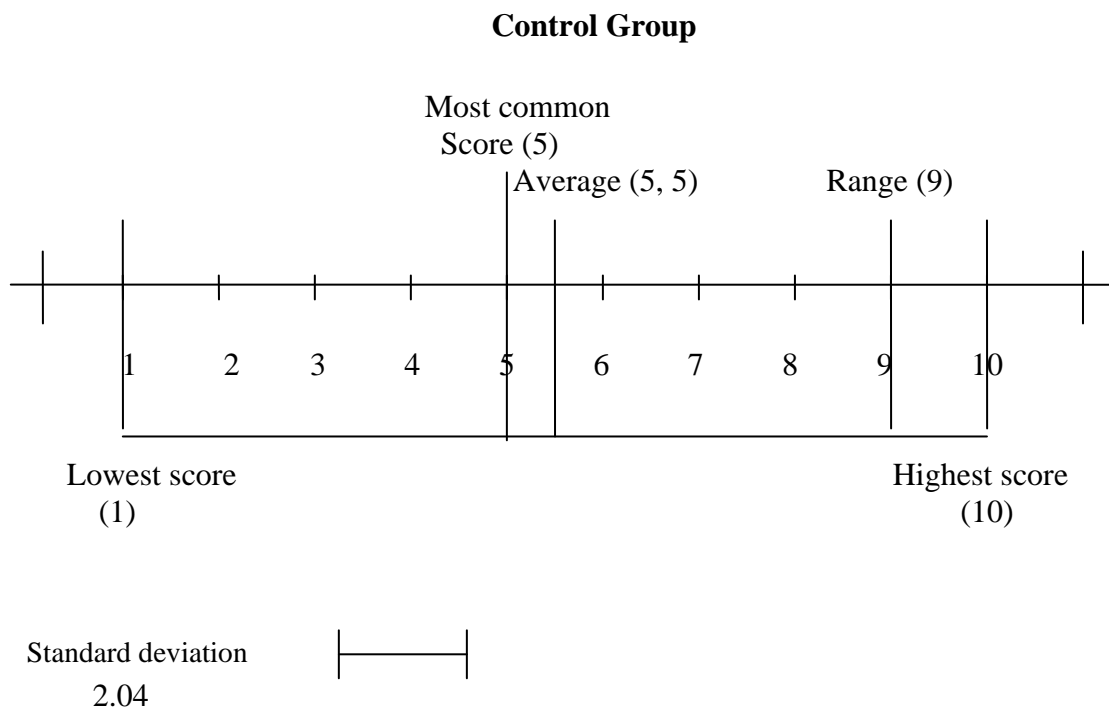


Figure 6 Post-test Control Group Results



## Frequencies

The results represented in table 8 illustrate that in the experimental group (5-2) seven different frequencies were found in the pre-test and five different frequencies in the post test; in contrast, in the control group (5-1) seven different frequencies were identified in the pre-test and ten in the post-test.

The highest frequencies were represented in the pre-test by ten students that got a score of three in the experimental group and nine students with a score of three in the control group, in contrast in the post test the highest frequency corresponded to fifteen students with the highest score of ten in the experimental group and eleven students with a score of five in the control group.

In the pre-test, the highest score was eight in the experimental group and nine in the control group represented by only one student who had obtained this score in both groups; on the contrary, in the post test the highest score was ten represented by half of the class in the experimental group and only two students in the control group.

At this point it is crucial to analyze the lowest score; this score in the pre-test was one and corresponded to three students in the experimental group and two students in the control group; while, in the post-test the lowest score was five in the experimental group and one in the control group represented by only one student who had obtained this score in both groups.

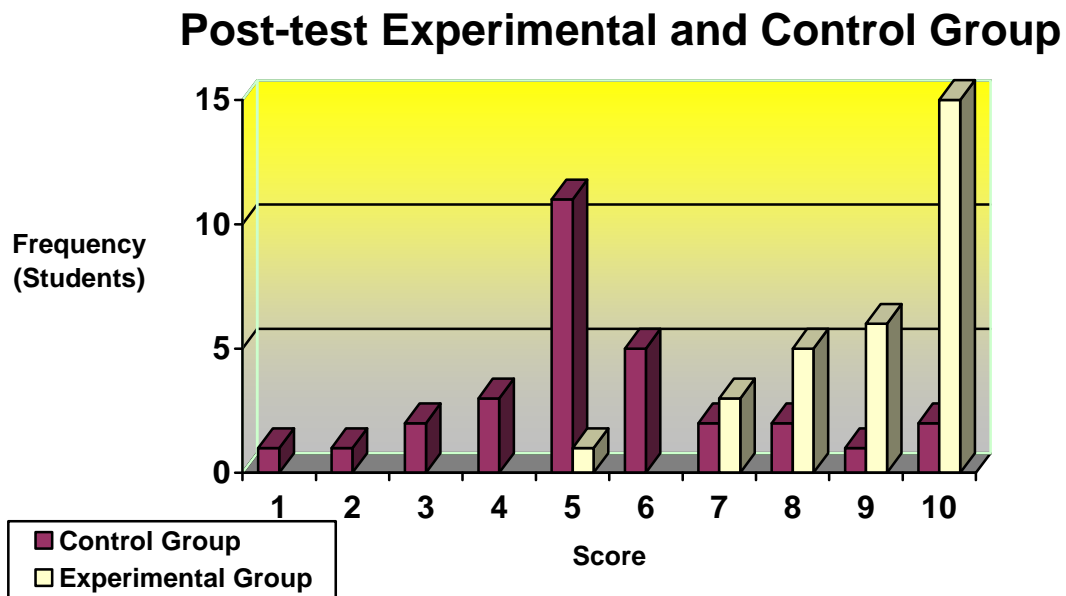
Table 8 shows the previous information

Table 8. Parallel between the Pre-test and Post-test Frequencies Control and Experimental Groups

Frequencies							
Pre-test				Post-test			
Experimental Group	Score	Control Group	Score	Experimental Group	Score	Control Group	Score
1	8	1	9	15	10	2	10
3	6	1	6	6	9	1	9
6	5	6	5	5	8	2	8
4	4	4	4	3	7	2	7
10	3	9	3	1	5	5	6
3	2	7	2			11	5
3	1	2	1			3	4
						2	3
						1	2
						1	1

The results of the post test demonstrate that the control group improved; nevertheless, making a comparison between both groups it is clear that the experimental group shows better results with the use of mnemonic techniques, this can be seen graphically in figure 7.

Figure 7. Post- test Frequencies and Scores (Experimental and Control Group)



The previous results demonstrate that the treatment showed satisfactory outcomes, after some instruction based on the development of lexical competence in a long term by means of some mnemonic techniques, which make the students put into practice some tools to develop easier the vocabulary learning not only for a moment but also in a long term.

Finally, it is important to analyze the previous information with percentages, the results afore mentioned showed that in the pre-test, the experimental group only 13% of the students passed the test, and 87 % of the students failed it. In contrast, in the post test 97 % of the students passed the test and only 3 % of the students failed it.

In the pre-test, the control group, 7 % of the students approved the test and 93% of students failed it, while in the post test 40 % of students approved the test and 60 % of the students failed it. Making a comparison between both groups it is evident that the level of lexical competence of the students improved in both groups although the experimental group demonstrated a significant performance in vocabulary learning.

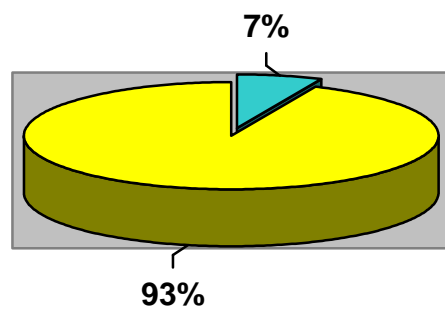
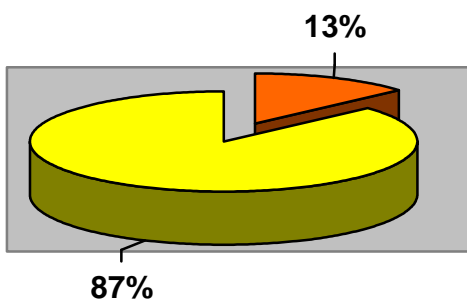
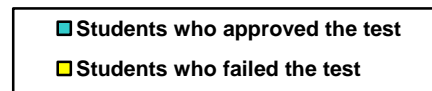
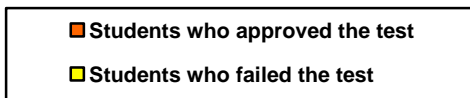
Figure 8 demonstrates the percentages.

Figure 8 pre-test and post-test percentages.

### Pre- Test Percentages

Experimental Group

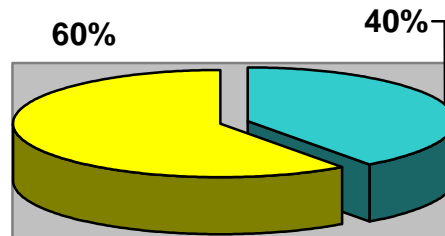
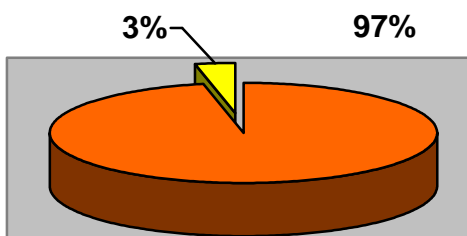
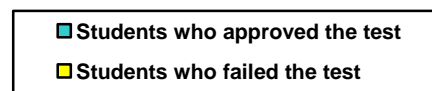
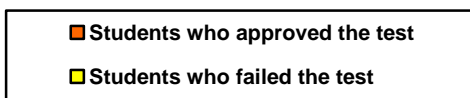
Control Group



### Post- Test Percentages

Experimental Group

Control Group



Contrasting pre and post test results it is evident that the students' lexical competence improved. These results could be analyzed taking into account the post test after using mnemonic techniques. In general, the results have indicated that there is a positive effect of mnemonic techniques on the vocabulary learning in a long term. So it may be assumed that mnemonic techniques push learners to gain an implicit and explicit memory during activities where the words have been taught through key word, method of Loci and songs and rhythms.

## CHAPTER 5: DISCUSSION

The aim of this study was to identify whether the use of mnemonic techniques had the potential to increase vocabulary learning in terms of long-term memory in a sample of thirty students in fifth grade of Institución Educativa Municipal Santa Barbara.

The findings of the present study have suggested that these techniques promote student's interest for learning new words in a meaningful and appropriate way. The results of the use of mnemonics have indicated that the learning of certain words is increasing with the use of these techniques since the results of the post-test were higher than the results of the pre-test.

The tables, figures and results explained in chapter 4 have shown that students under treatment conditions (mnemonic techniques) learn vocabulary 97% better in a long term rather than with the use of traditional techniques.

The results obtained in the post-test have illustrated a significant improvement in lexical competence, during and after the treatment period. It means that students have not only memorized and recited the words for the moment but also they have incorporated the use of these words into a long-term memory; what was the principal objective of this research.

The mnemonic techniques have been found to be effective in developing the learner's ability to use his or her lexical competence communicatively if instruction is given taking into account an adequate procedure and students' interests and needs.

Comprehension and cooperation in the application of these techniques were exceptionally high from the students. Nevertheless, it could not be made any assumption about the time that requires the mnemonic techniques because it takes time for the students to assimilate in a long term, the knowledge acquired in classroom and apply it to the real life.

The results of the post- test have been particularly interesting because they have confirmed the assumption that an adequate selection of methods is transcendental to consolidate word form and meaning in memory. “Which method learners use for consolidating word form and meaning in memory does not seem to be as crucial as they do it. The more words learners can get through this method the more words will know overall”. Hatch & Brown, 1995 p. 389). .

This study is important because it has demonstrated that lexical competence is a skill to be mastered. In fact, extensive research in learning has indicated that students who have reported active use of mnemonic techniques have been more likely to be successful in developing long term memory, than students who have not been using them. When students have confidence about themselves and know the alternatives that they have to improve, keep and increase their knowledge in long term memory favorable outcomes result in the research field.



## CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

After analyzing the results of the present study, the following conclusions were established:

The application of mnemonic techniques improved vocabulary learning in a long term, showing better results in the learning of new words in comparison with traditional techniques to develop vocabulary in fifth grade students of “Institución Educativa Municipal Santa Barbara”.

The use of mnemonic techniques were appropriated and the most of the objectives were satisfactory accomplished because the employment of different rhythms, and other techniques, guided to the students to increase their knowledge of words not only for the moment but also in a long term which is the main objective of this research.

Materials such as pictures, drawings, songs, wallpapers, flashcards, made easier to maintain the students' interest during the development of each session class. The students participated eagerly developing exercises, learning new songs and rhythms and making associations between their previous knowledge and the new words acquired in classroom.

During this study, the materials and procedure previously mentioned (in chapter 3), had enough acceptance by the students, because they were selected and adapted taking into account the students' contexts, interests, levels, background and needs, which are important factors that facilitate the development of an efficient vocabulary learning.

Method of Loci, Rhythms and Songs and Keyword Method helped to teach vocabulary in an amusing way, showing better results in long term memory learning than the use of traditional techniques such as memorizing long lists of words looking up

the dictionary, making translations, or the mechanical process of writing the same word by several times.

The use of mnemonic techniques showed not only a positive effect in vocabulary learning because the experience acquired in the practice and implementation of this study has demonstrated that these techniques could be also used to develop writing, listening, speaking and reading.

Another aspect that is important to mention is that these techniques served as instruments to develop students' creativity, imagination and originality; key abilities that smooth the vocabulary learning.

As a final conclusion, it could be determined that during this study the student was the most important and central part while the teacher was a facilitator and a guide that permitted to the students to construct their new knowledge by themselves. This part was transcendental because it allowed to the students to infer the new knowledge, make sense of it and consequently to process it into long term memory.

### Recommendations

In this study, it is considered that to set some recommendations could be suitable not only for teachers and students that could be interested in apply mnemonic techniques but also if someone is interested in doing future research in this field.

1. It is a good idea to adapt the topic, bearing in mind not only the general standards that the institution establishes to be important, but also what the students need, their context and what is interesting for them, and at the same time has relation with their previous knowledge, because it is necessary to facilitate the learning process.

2. It is very important the activities to be carefully planned before being presented to the student in order to avoid possible failures that can obstruct the correct development of the mnemonic techniques and its respective application.
3. It is necessary to state that some activities could no be the most appropriate depending on the level and age of students; for example, some rhythms and songs such as “twinkle, twinkle little star” and “Frère Jacques” are more adequate for children than teenagers or adults. Equally the use of drawings such as animals, people and so forth, in the keyword and method of Loci have to be analyzed previously in order to determine if their application with the audience would have the hoped effect.
4. It is indispensable that the teacher uses all his or her creativity and enthusiasm during the application of mnemonics, to obtain the students attention which is transcendental, if the teacher wants that students achieve the new knowledge in long term memory.
5. To have a good rapport between teacher and students is essential to obtain the final goals that teachers have proposed so that students feel comfortable asking questions and possible dudes during the session class in order to prevent possible error fossilizations that are going to be stored in long- term memory.
6. Finally, it is convenient to identify during the process what type of students work better with method of Loci, keyword or rhythms and song, and create some reinforcement activities that can be worked at the end of each unit or topic, in groups of work that can be programmed in advance depending on the students’ preferences and the time.

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# What is mnemonic memory

Ancient Greek scholar states “Memory is an admirable gift of nature by which we recall past things, we embrace present things and we contemplate future things through their likeness to past things”.

The Oxford dictionary defines a mnemonic as "of or designed to aid the memory". The word is derived from the name of the Greek goddess of memory - Mnemosyne. You see the Greeks thought so much of the ability to memorize that they worshipped it in the form of a goddess. Sophisticated mnemonic techniques elsewhere but each of the items below is a simple popular aid to memory that we can all use straight away.

Mnemonic instruction refers to instructional or learning strategies designed specifically to improve memory. In many cases, it refers to modifying or changing to-be-learned information to link it directly to information the learner already knows.

Mnemonics is a scientific tested technique based on our knowledge of principals of memory. There is the associations (stories), ridiculous associations, the key word method, method of Loci and the use of acronyms and acrostics.

The famous **ROY G BIV** for learning the colors of the rainbow is an example a mnemonic acronym as well as the not so famous **RAVEN** to remember when to use “affect” VS “effect”-**R**emember, **A**ffect, **V**erb, **E**ffect, **N**oun. Mnemonics strategies gathered from research articles has been used to learn people’s names, foreign language, to learn the states and capitals, letters of the alphabet and spelling words to name a few.

# Rhythms and songs

Rhythm, repetition, melody, and rhyme can all aid memory. Are you familiar with Homer's *Odyssey*? If you are familiar with the book, then you know that it is quite long. That is why it is so remarkable to realize that this, along with many ancient Greek stories, was told by storytellers who would rely solely on their memories. The use of rhyme, rhythm, and repetition helped the storytellers remember them.

You can use the same techniques to better remember information from courses. For example, even the simple addition of familiar rhythm and melody can help. Do you remember learning the alphabet? Many children learn the letters of the alphabet to the tune of "Twinkle, Twinkle, Little Star." In fact, a people demonstrated how she memorized the quadratic formula (notorious among algebra students for being long and difficult to remember) by singing it to a familiar tune!

Using these strategies can be fun, particularly for people who like to create. Rhymes and songs draw on your auditory memory and may be particularly useful for those who can learn tunes, songs, or poems easily. Like the other techniques in this section. Also, when devising rhymes and songs, don't spend too much time creating them.



# Where is Thumb King

**Topic:** Adjectives

**Objective:** To reinforce adjectives such as (tall, fat, thin, short, medium etc)

**Skill focus:** Lexical competence

**Additional Vocabulary:** thumb, king, run away,

Where is thumb king, where is thumb king  
Here I am, here I am  
How are you this morning?  
Very well I thank you  
Run away, run away

Where is tall man, where is tall man  
Here I am, here I am  
How are you this morning?  
Very well I thank you  
Run away, run away

Where is fat girl, where is fat girl  
Here I am, here I am  
How are you this morning?  
Very well I thank you  
Run away, run away

Where is thin boy, where is thin boy  
Here I am, here I am  
How are you this morning?  
Very well I thank you  
Run away, run away

Where is short man, where is short man  
Here I am, here I am  
How are you this morning?  
Very well I thank you  
Run away, run away

# Boy and Girl

**Topic:** Professions

**Objective:** To reinforce the different occupations in English and to induce this knowledge into Long Term memory.

**Skill focus:** The main skill focus is on lexical competence but at same time oral skills, written skills and listening

**Additional Vocabulary:** friend, always, want, etc.

I am a boy and you are a girl  
I am a boy and you are a girl  
I am a boy and you are a girl  
Do you want to be my friend?

I am a girl and you are a boy  
I am a girl and you are a boy  
I am a girl and you are a boy  
Yes, I want to be your friend

La, la la la ....

Yes I'll always be your friend

I am a nurse and you are a policeman  
I am a nurse and you are a policeman  
I am a nurse and you are a policeman  
Do you want to be my friend?

I am a policeman and you are a nurse  
I am a policeman and you are a nurse  
I am a policeman and you are a nurse  
Yes, I want to be your friend

La, la la la ....

Yes I'll always be your friend

Engineer  
Teacher  
Lawyer  
Student  
Architect  
Priest  
Doctor  
Fireman

# Colors

**Topic:** Colors

**Objective:** To reinforce the colors in English through the use of this song and to induce this knowledge into students long term memory.

**Skill focus:** Lexical competence

**Additional Vocabulary:** apple, shoes, lemon, stars, cherries, coffee, sun, orange, to know, to tell, why.

Sung to “Twinkle, twinkle little star”

Red, red apple  
Black, black shoes  
Green, green lemon  
Blue, blue sky  
White, white stars  
Pink, pink cherries  
Brown, brown coffee  
Yellow, yellow sun  
The easier is orange  
And you know  
Why I tell you that.

# Alphabet Banquet

**Topic:** Alphabet Banquet

**Objective:** To reinforce some of the most common products such as vegetables, fruits and meats and to increase the students' vocabulary in LTM.

**Skill focus:** The main skill focus is on lexical competence but at same time oral skills, written skills and listening

**Additional vocabulary:** The letters of the alphabet.

Sung to "Twinkle, twinkle little star"

A Apple  
B Bread  
C Carrot  
D Date  
E Egg  
F Figs  
G Grapes  
H Hamburger  
I Ice-cream  
J Juice  
K Kiwi fruit  
L Lemon  
M Milk  
N Nut  
O Orange  
P Pears  
Q Quince  
R Raddish  
S Sugar  
T Tomato  
U Urd  
V Vegetables  
W Water  
X Brand X  
Y Yam  
Z Zucchini

A is for apple  
B is for bread  
C is for carrot  
D is for date  
E is for egg  
F is for figs  
G is for grapes  
H is for hamburger  
I is for ice-cream  
J is for juice  
K is for kiwi fruit  
L is for Lemon  
M is for milk  
N is for nut  
O is for orange  
P is for pears  
Q is for quince  
R is for raddish  
S is for sugar  
T is for tomato  
U is for urd  
V is for vegetables  
W is for water  
X is for brand X  
Y is for yam  
Z is for Zucchini

# Pronouns

**Topic:** Pronouns

**Objective:** To reinforce the pronouns in English and to induce this knowledge into Long Term memory.

**Skill focus:** The main skill focus is on lexical competence but at same time oral skills, written skills and listening

**Additional Vocabulary:** friend, boy, girl, to want etc.

I am a boy and you are a girl  
I am a boy and you are a girl  
I am a boy and you are a girl  
Do you want to be my friend?

I am a girl and you are a boy  
I am a girl and you are a boy  
I am a girl and you are a boy  
Yes, I want to be your friend

La, la la la ....

Yes I'll always be your friend

He is a boy and she is a girl  
He is a boy and she is a girl  
He is a boy and she is a girl  
Do you want to be my friend?

She is a girl and he is a boy  
She is a girl and he is a boy  
She is a girl and he is a boy  
Yes, we want to be your friend

It is a dog and they are friends  
It is a dog and they are friends  
It is a dog and they are friends  
Do you want to be my friends?

It is a dog and they are friends  
It is a dog and they are friends  
It is a dog and they are friends  
Yes, we want to be your friend

La, la la la ....

# Animals

**Topic:** The Animals

**Objective:** To increase the level of vocabulary identifying different animals and at the same time using the song Old Mc Donald maintaining this knowledge in Long term Memory.

**Skill focus:** Lexical competence

**Additional Vocabulary:** cow, duck, pig, turkey, lamb, and so forth

## OLD MAC DONALD

Old Mac Donald had a farm, eeay eeay O',  
And on his farm he had a cow, eeay eeay O',  
With a moo, moo here and a moo, moo there  
Here a moo, there a moo, everywhere a moo - moo

Duck = "quack – quack"

Pig = "oink – oink"

Turkey = "gobble – gobble"

Lamb = "baa – baa"

# Verbs

**Topic:** The Verbs

**Objective:** To increase the level of vocabulary identifying different verbs using the song Frère Jacques to keep this knowledge in Long term Memory.

**Skill focus:** oral, written, and listening skills

**Additional Vocabulary:** sleep, cook, clean, wash, write, and so forth

## FRERE JACKES

Are you sleeping?  
Are you sleeping?  
Brother John  
Brother John  
Morning bells are ringing  
Morning bells are ringing  
Din don dan, Din don dan

Are you cooking?  
Are you cooking?  
Brother John  
Brother John  
Morning bells are ringing  
Morning bells are ringing  
Din don dan, Din don dan

Are you cleaning?  
Are you cleaning?  
Brother John  
Brother John  
Morning bells are ringing  
Morning bells are ringing  
Din don dan, Din don dan

Are you washing?  
Are you washing?  
Brother John

Brother John  
Morning bells are ringing  
Morning bells are ringing  
Din don dan, Din don dan

Are you writing?  
Are you writing?  
Brother John  
Brother John

# House Objects

**Topic:** House Objects

**Objective:** To increase the level of vocabulary identifying a variety of objects of the house and at the same time using the rhythm of Frère Jackes to keep this knowledge in Long term Memory.

**Skill focus:** oral, written, and listening skills

**Additional Vocabulary:** house, stove, bed, flowers, and so forth

## IN MY HOUSE

(Frère Jackes)

I have a house  
I have a house  
It is mine it is mine  
I have many objects  
I have many objects  
In my house in my house

I have one stove  
I have one stove  
It is mine it is mine  
I have many objects  
I have many objects  
In my house in my house

I have flowers  
I have flowers  
They are mine they are mine  
I have many objects  
I have many objects  
In my house in my house

I have one bed  
I have one bed  
It is mine it is mine  
I have many objects  
I have many objects  
In my house in my house



# Musical Instruments

**Topic:** Musical Instruments

**Objective:** To increase the level of vocabulary identifying some musical instruments and at the same time using the rhythm of the song “This is the way” to keep this knowledge in Long term Memory.

**Skill focus:** oral, written, and listening skills

**Additional Vocabulary:** flute, guitar, piano, trumpet, etc.

## THIS IS THE WAY

This is the way I play the guitar  
Play the guitar play the guitar  
This is the way I play the guitar  
So early in the morning

This is the way I play the piano  
Play the piano play the piano  
This is the way I play the piano  
So early in the morning

This is the way I play the flute  
Play the flute play the flute  
This is the way I play the flute  
So early in the morning

Battery  
Trumpet  
Trombone

# Sports

**Topic:** Sports

**Objective:** To increase the level of vocabulary identifying some sports. At the same time using the rhythm of the song Frère Jacques with the purpose of maintain this knowledge in Long term Memory.

**Skill focus:** oral, written, and listening skills

**Additional Vocabulary:** soccer, surfing, skiing, etc.

## WHAT I PLAY

I like soccer, I like soccer  
In the school, In the school  
I enjoy the soccer  
I enjoy the soccer  
In the school, In the school

I like surfing, I like surfing  
At the beach, at the beach  
I enjoy the surfing, I enjoy the surfing  
At the beach, at the beach

I like skiing, I like skiing  
On the snow, on the snow  
I enjoy skiing, I enjoy skiing  
On the snow, on the snow

# Method of Loci

This Loci strategy was used by ancient orators to remember speeches, and it combines the use of organization, visual memory, and association. Before using the technique, you must identify a common path that you walk. This can be the walk from your dorm to class, a walk around your house, whatever is familiar. What is essential is that you have a vivid visual memory of the path and objects along it.

Once you have determined your path, imagine yourself walking along it, and identify specific landmarks that you will pass. For example, the first landmark on your walk to house could be your dorm room, next may be the front of the residence hall, next a familiar statue you pass, etc. The number of landmarks you choose will depend on the number of things you want to remember.

Once you have determined your path and visualized the landmarks, you are ready to use the path to remember your material. This is done by mentally associating each piece of information that you need to remember with one of these landmarks. For example, if you are trying to remember a list of mnemonics, you might remember the first--acronyms--by picturing SCUBA gear in your dorm room (SCUBA is an acronym).

You do not have to limit this to a path. You can use the same type of strategy with just about any visual image that you can divide into specific sections. The most important thing is that you use something with which you are very familiar.

If someone reads a list of unrelated words to you, just once, how many do you think you could remember? Give it a try. Have someone read a list of 10 words to you at a slow but steady pace (about 1 word per second). Rather than using any of the memory strategies presented here, simply try to concentrate on the words and remember them. How many words did you remember?

Now take a few minutes to identify a path or object that you can use in the method of Loci. Familiarize yourself with each of sections of your path or object. Mentally go through each of the Loci (locations) and visualize them as best you can. Remember, it is important to be able to visualize and recall each location readily. Once you have done this, have your friend read you a different list of words. This time, try to create visual images of the words associated with one of the locations. This may not come easy at first, but with practice you should be able to create these visual images more readily. If you find that you are having difficulty coming up with the images quickly, practice on some more lists until you have improved. Chances are, when you become familiar with using this technique, you will be able to remember many more words (maybe all 10 items).

Practice the Loci mnemonic technique to sharpen your skills.

# Colors

**Topic:** Colors

**Objective:** To reinforce the colors in English through visual memory (the use of different places in our school) and at the same time to induce this knowledge into students' long-term memory.

**Skill focus:** Lexical competence

**Materials:** board, marker, and human resource

The teacher and the students visit their school.

## “MY SCHOOL’ COLORS”

Teacher: Ok! We are here in the bath

Please, tell me what is the water's color?

Students: teacher, teacher, water is blue.

Teacher Ok, remember water is blue.

Now, let's go to the park, and let's see the roses,  
What is their color?

Students: teacher the roses are pink,

Teacher Ok, Excellent, remember the roses are pink.

Now let's we see the restaurant, tell me what is the restaurant's color?

Students: teacher, teacher the restaurant is yellow.

Teacher: Ok remember, water is blue, the roses are pink  
and the restaurant is yellow, now let's we see our shoes,  
what is their color?

Students: My shoes are black,

Teacher: Ok, Excellent now tell me, what is grass' color?

Students: Grass is green.

Teacher: Water is.... (Students responses...)

Roses are....

Restaurant is ....

Our shoes are.....

Grass is....

Important:

After this activity the teacher and students come back to the classroom and they begin remembering the experience through the visualization of each location, and making associations between the visual image and colors.

# Professions

**Topic:** Professions

**Objective:** To reinforce the different occupations in English and to induce this knowledge into Long Term memory.

**Skill focus:** The main skill focus is on lexical competence.

**Materials:** board, marker, and human recourse

Teacher: We are going to imagine that we are going to visit some places in Pasto.  
The first one, is our police station, please tell me, who works in the police Station?

Students: The policemen teacher, Ok, excellent, that is the idea  
police station- policeman

Teacher: Now let's we go to the hospital, imagine that we are walking into the Departmental hospital. Please, children describe it to me.

Students: It is white, it has many patients, it is has doctors and nurses.

Teacher: Good, remember, hospital- doctors and nurses.

Now let's visite our Supermarket, imagine it with all its products, and look  
And tell me who works in the supermarket?

Students: (The students begin telling proper names, but it is the teacher's work to induce them to the topic ) salesman

Teacher: Excellent, the salesman, remember:

supermarket-salesman. Now, lets we visit our school, who works here?

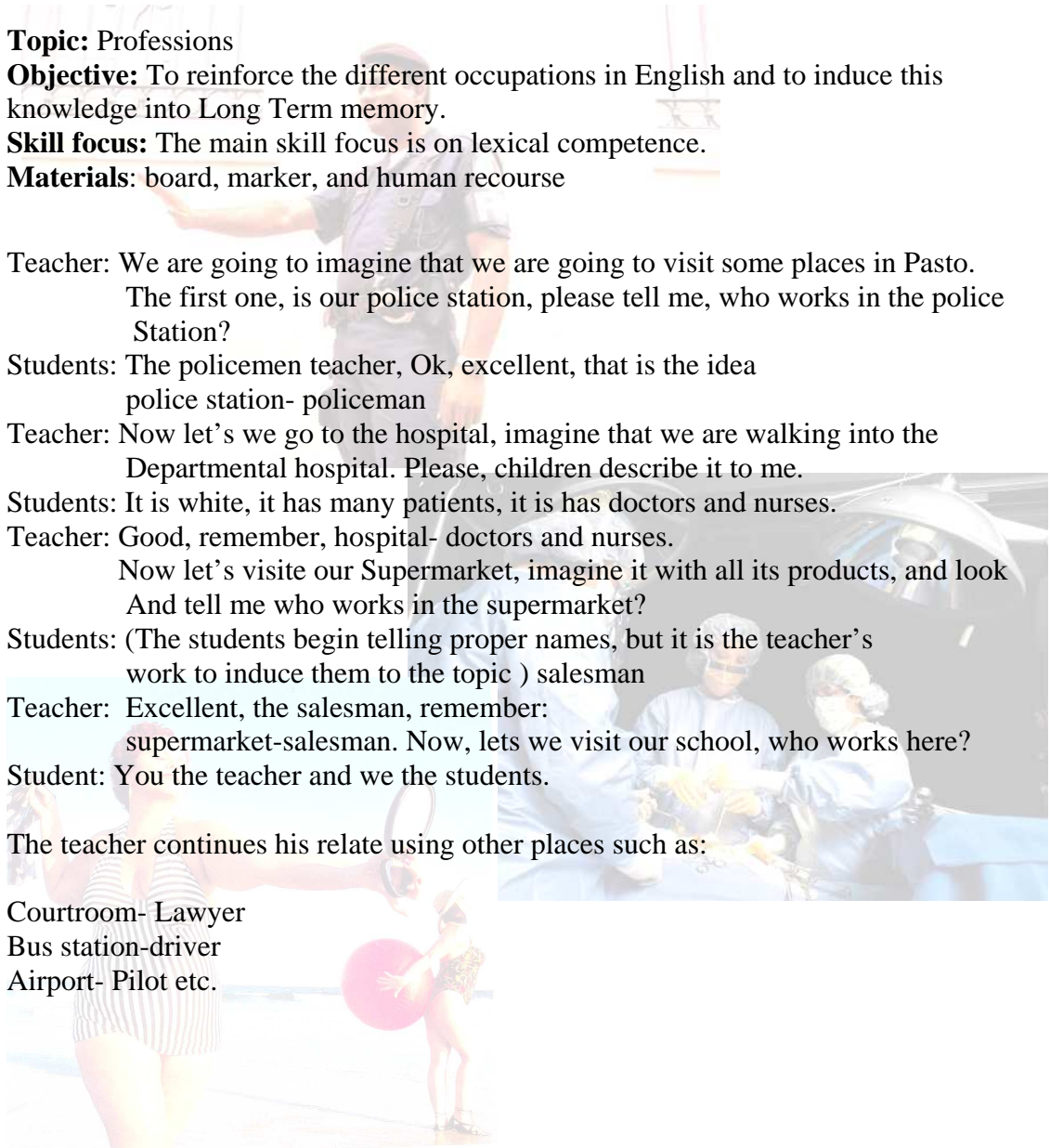
Student: You the teacher and we the students.

The teacher continues his relate using other places such as:

Courtroom- Lawyer

Bus station-driver

Airport- Pilot etc.



# The Supermarket

**Topic:** Food

**Objective:** To reinforce some of the most common products such as vegetables, fruits and meats and to increase the students' vocabulary in LTM.

**Skill focus:** The main skill focus is on lexical competence but at same time oral skills, written skills and listening

The teacher and the students plan a visit to "Alkosto"

The teachers have talked with the administrator and he told them that it is not a problem if the teacher assumes all the responsibility for her students.

Teacher: Let's visit the fruit section:

Here we have watermelons, pineapples, peaches, oranges, apples, lemons etc.

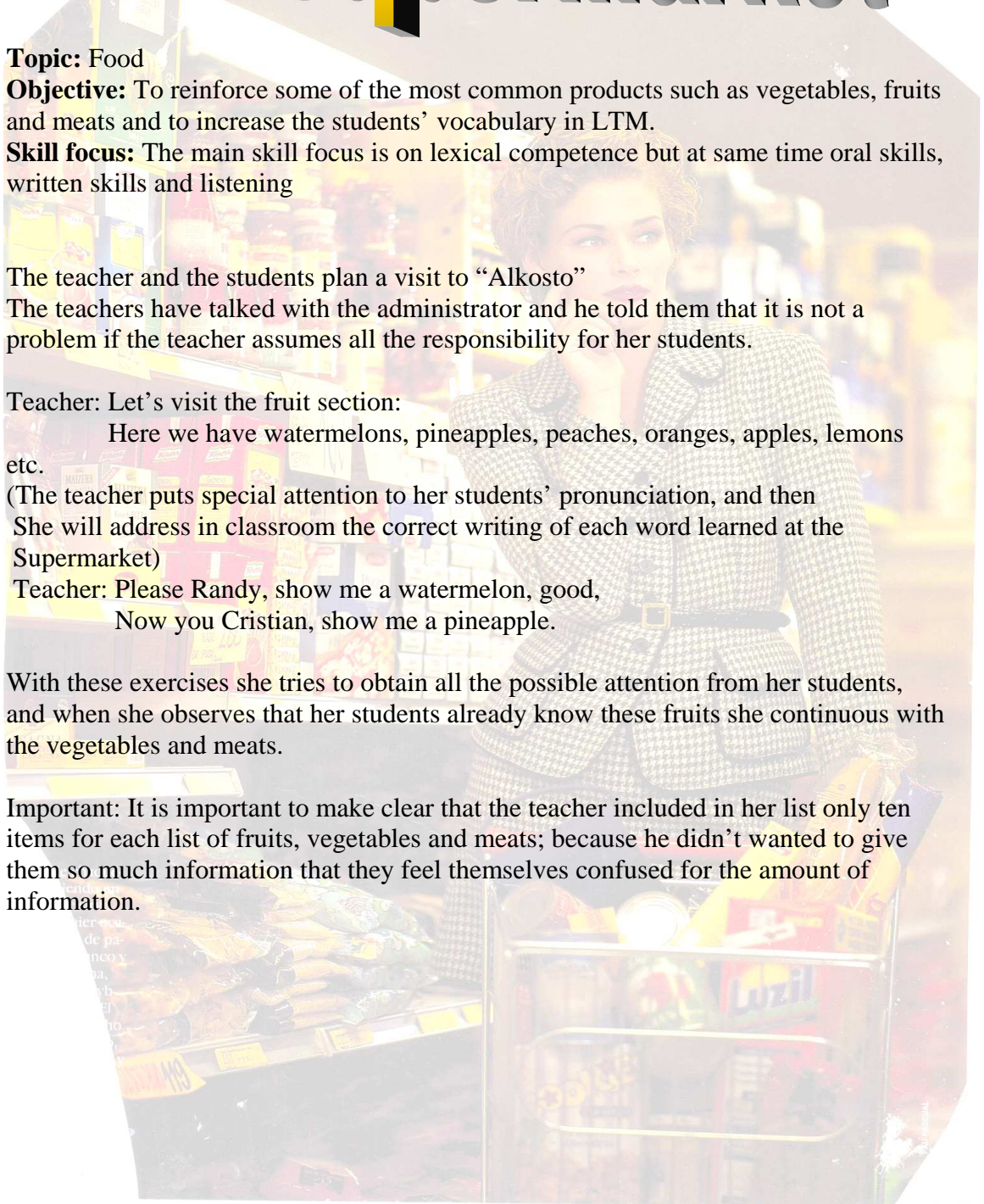
(The teacher puts special attention to her students' pronunciation, and then She will address in classroom the correct writing of each word learned at the Supermarket)

Teacher: Please Randy, show me a watermelon, good,

Now you Cristian, show me a pineapple.

With these exercises she tries to obtain all the possible attention from her students, and when she observes that her students already know these fruits she continuous with the vegetables and meats.

Important: It is important to make clear that the teacher included in her list only ten items for each list of fruits, vegetables and meats; because he didn't wanted to give them so much information that they feel themselves confused for the amount of information.



# Means of Transportation

**Topic:** Means of transportation

**Objective:** To reinforce some of the most common means of transportation in English and to increase the students' vocabulary in LTM.

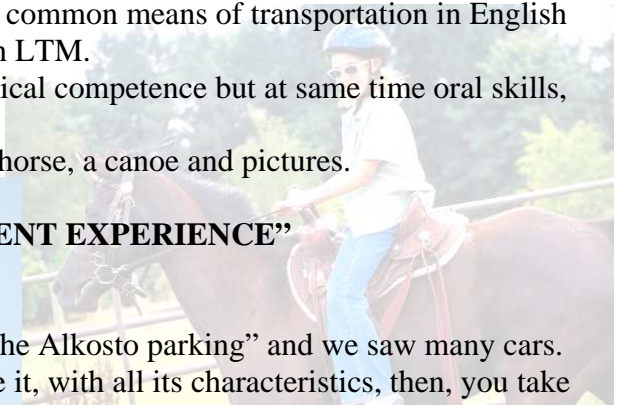
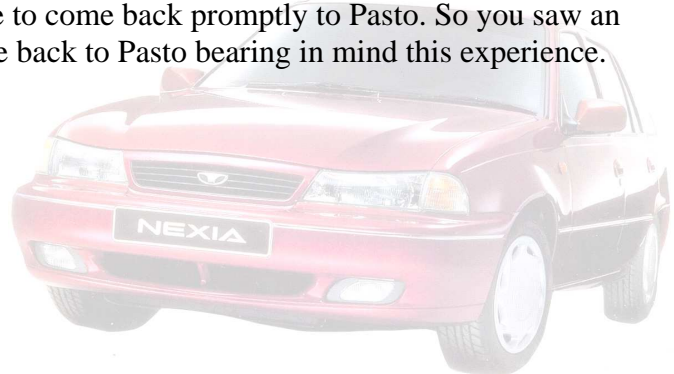
**Skill focus:** The main skill focus is on lexical competence but at same time oral skills, written skills and listening

**Materials:** the sounds of a car, a plane, a horse, a canoe and pictures.

## “AN EXCELLENT EXPERIENCE”

Teacher:

We are going to imagine that we are in “the Alkosto parking” and we saw many cars. Now try to think your favorite car, imagine it, with all its characteristics, then, you take the car and you go to visit your favorite farm, imagine its food and people who live there and visualize yourself walking in this farm. Suddenly you saw far in the distance a horse, the horse of your dreams, you mount this horse and ride it until you arrive to “the Cocha lagoon” you see a canoe and you make a little promenade in this lagoon. Here in the Cocha you eat a delicious trout, and you are very happy, but someone tells you that it is very late and you have to come back promptly to Pasto. So you saw an airport, you pilot a plane and come back to Pasto bearing in mind this experience.





# The Animals

**Topic:** The Animals

**Objective:** To increase the level of vocabulary identifying different animals through a remembrance about a trip with the purpose of keep this information in Long term Memory.

**Skill focus:** Lexical competence

**Additional Vocabulary:** horse, fish, bird, bee and so forth

## A WALK IN CHACHAGUI

Teacher: Do you remember when we went to Chachagui?

Students: Yes

Teacher: Remember when we walked around comfamiliar; think about all the animals that we saw in that place. Some horses were walking on the mountain, some of you wanted to ride them.

Students: yes David wanted to ride the horses

Teacher: Then we saw some birds flying on the sky. After you left the swimming pool we walked close to the lagoon and there were some fish swimming there, remember that you wanted to fish but it was forbidden.

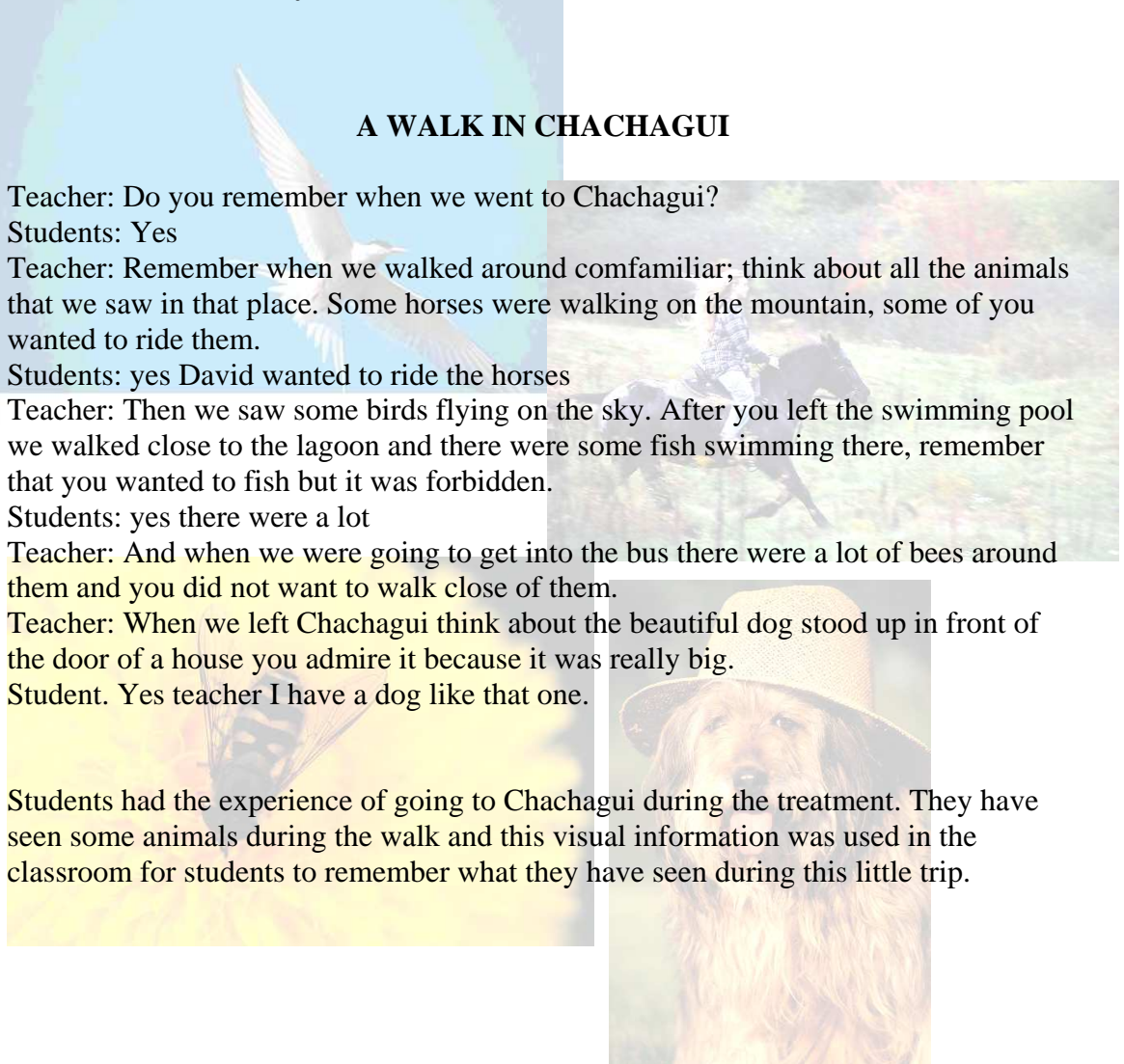
Students: yes there were a lot

Teacher: And when we were going to get into the bus there were a lot of bees around them and you did not want to walk close of them.

Teacher: When we left Chachagui think about the beautiful dog stood up in front of the door of a house you admire it because it was really big.

Student. Yes teacher I have a dog like that one.

Students had the experience of going to Chachagui during the treatment. They have seen some animals during the walk and this visual information was used in the classroom for students to remember what they have seen during this little trip.



# Verbs

**Topic:** The Verbs

**Objective:** To increase the level of vocabulary identifying different actions that students do every day making this knowledge to be in Long term Memory.

**Skill focus:** lexical competence

**Additional Vocabulary:** wake up, take, brush, go and so forth

## ONE DAY OF MY LIFE

Teacher: What do we do every day of our lives?

Students: we wake up

Teacher: ok, we wake up, repeat please

Students: we wake up. Have breakfast

Teacher: ok then we have breakfast

Students: we have breakfast. shower

Teacher that's good. Then we have a shower

Students: we have a shower. Teeth

Teacher: that's good you brush your teeth.

Students: the school

Teacher: Then we go to school

Students: we go to school. Study

Teacher: yes you have to study, and what do you do during the break?

Students: we play

Teacher: you play with you friends

Students: we eat

Teacher: Yes you eat some snacks...

The class continues asking for information that students do everyday. When the students say some action that they do, the teacher put this information in a sentence so that the students use it in a meaningful way and then the students have to repeat the sentence constructed by the teacher

# House Objects

**Topic:** House Objects

**Objective:** To develop the lexical competence through the recognition of different objects of the house.

**Skill focus:** vocabulary

**Additional Vocabulary:** chair, table, desk, bed, refrigerator, stove, etc.

## MY HOUSE

Teacher: when we are in our house we can observe a lot of objects that we have inside it. When you come into your house what is the first thing you see?

Students: I see chairs

Teacher: Ok you see chairs and what else?

Student: there is a table in the living room

Teacher: Ok after you go into the living room where do you go?

Student: I go to my bedroom

Teacher: What can you see in your bedroom?

Student: My bed

Teacher: That's good. You have to remember all the objects that you have mentioned chairs, table, and bed. What else?

Student: I see my T.V. I see my Desk

Teacher: Ok. And when you go to the kitchen what can you see?

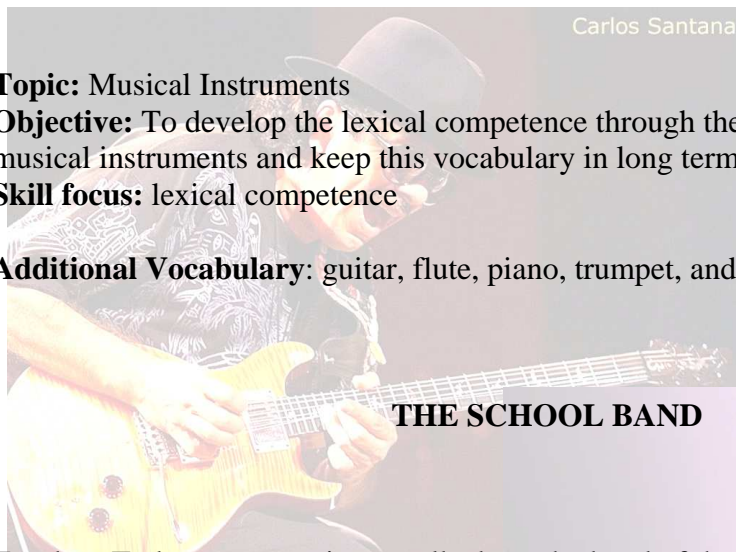
Student: I see the refrigerator

Teacher: That's good

Student: I see the stove

The teacher has to follow asking questions to the students so that they remember the different objects that they have in their house. In this way, the vocabulary seen in the classroom is going to be related with their actual situation and they will remember later the vocabulary using a mental image of the things in their house.

# Musical Instruments



**Topic:** Musical Instruments

**Objective:** To develop the lexical competence through the identification of different musical instruments and keep this vocabulary in long term memory.

**Skill focus:** lexical competence

**Additional Vocabulary:** guitar, flute, piano, trumpet, and so forth.

## THE SCHOOL BAND

Teacher: Today we are going to talk about the band of the school. Last weekend they were in the mother's day and they had interpreted pretty songs. But do you remember what kind of instruments they had?

Student: they had two guitars

Teacher: yes

Student: A drum set

Teacher: Fine they had a drum set

Student: They had a drum set, a trumpet

Teacher: They had a trumpet too.

Student: Two cymbals

Teacher: Great! A girl had two cymbals

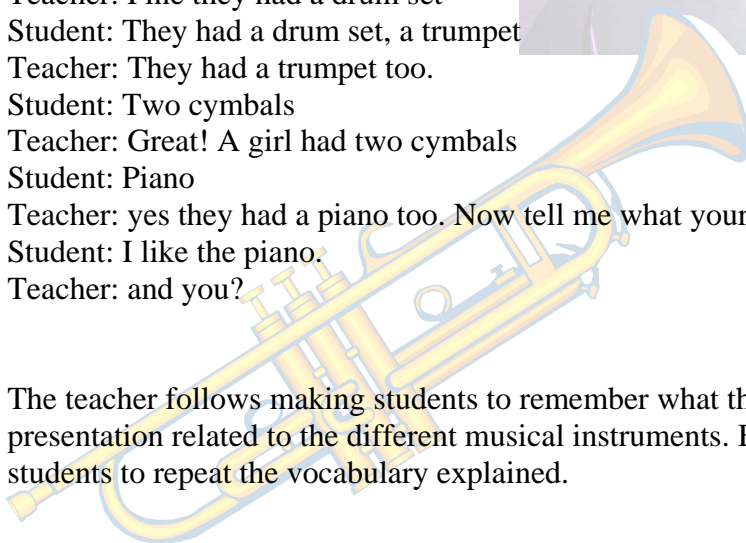
Student: Piano

Teacher: yes they had a piano too. Now tell me what your favorite instrument is

Student: I like the piano.

Teacher: and you?

The teacher follows making students to remember what they have seen in the presentation related to the different musical instruments. Besides it is necessary students to repeat the vocabulary explained.



# Sports

**Topic:** Sports

**Objective:** To increase the vocabulary level, through the recognition of some sports and maintain this vocabulary in long term memory.

**Skill focus:** lexical competence

**Additional Vocabulary:** soccer, basketball, climbing, parachuting etc.

## PLAYING AT THE SCHOOL

**Teacher:** Today we are going to talk about the sports now tell me, what are the sports that you like the most?

**Student:** Teacher, I like soccer

**Teacher:** Soccer, that's one of the sports that you practice every day here, at the school.

**Student:** I like basketball, and I play basketball

**Teacher:** Very good another sport that you practice

**Student:** I saw in television some men in the sea

**Teacher:** Surfing. They were surfing

**Student:** They were climbing

**Teacher:** What other sports do you like?

**Student:** I like the people that use parachutes

**Teacher:** It is parachuting. They were practicing parachuting

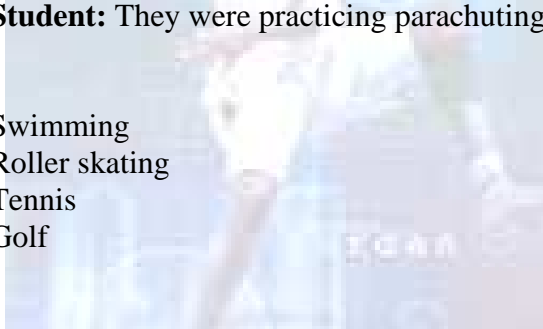
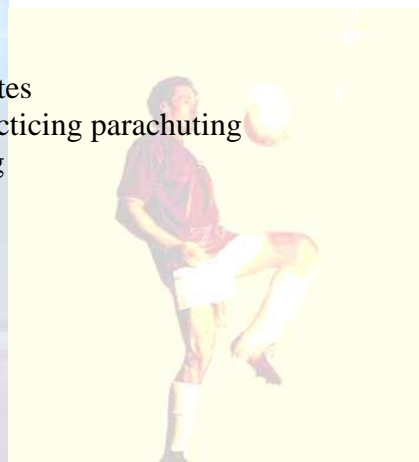
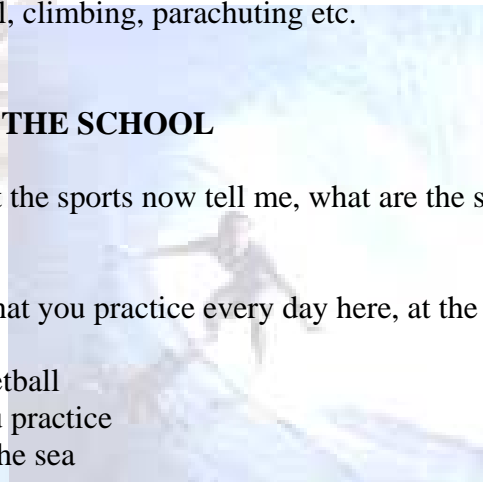
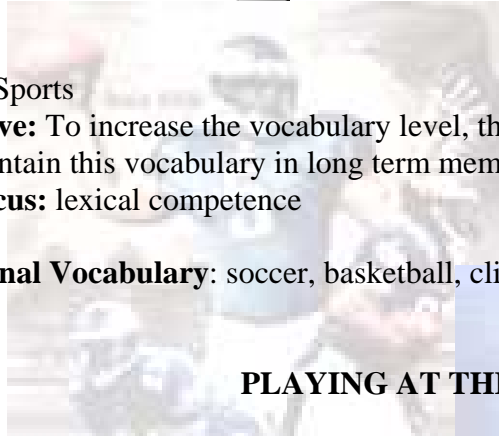
**Student:** They were practicing parachuting

Swimming

Roller skating

Tennis

Golf



# The Keyword Method

The keyword method is extremely versatile and has a variety of helpful applications. One possibility is in teaching new vocabulary words.

The keyword method has been especially pushed as an effective strategy for learning foreign vocabulary. It is presumably equally valuable for extending your native-language vocabulary and learning technical jargon, and has also been used successfully to teach social studies facts (e.g., the products of a country; capital cities), science facts (e.g., chemical reactions, parts of the skeletal and nervous systems) and the names and faces of people.

There are two stages to the method:

- link the foreign word with an English word that sounds like some part of the foreign word (e.g., the Spanish *carta* sounds like the English *cart*). This (*cart*) is the **keyword**.
- link the keyword with the English meaning of the foreign word by forming an interactive image (e.g., *carta* is related with *letter*, so you could visualize a letter inside a cart).

If you want to understand what a word means when you come across it the keyword method is probably the best memory strategy. In other words, your letter in the cart will help you remember what *carta* means.

# Key words with Means of Transportation

**Topic:** Means of transportation

**Objective:** To reinforce some of the most common means of transportation in English and to increase the students' vocabulary in LTM.

**Skill focus:** The main skill focus is on lexical competence but at same time oral skills, written skills and listening

**Materials:** Pictures in which students can visualize the different sentences.

The Spanish *Aeroplano* sounds like the English *Aeroplane*. This (*Aeroplane*) is the **keyword**. So, the teacher links the keyword with the English meaning of the foreign word by forming an interactive image (Example: *Aeroplane* is related with *Airport*, so you could visualize an aeroplane in an airport).

KEYS WORDS		
SPANISH	ENGLISH	NEW WORD
Aeroplano	Aeroplane	Airport
Carro	Car	Car-parking
Bicicleta	Bicycle	Biker
Canoa	Canoe	Canoeist
Tren	Train	Speed
Bus	Bus	Driver
Taxi	Taxi	Passenger

Effect of Mnemonic Techniques



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# Key words with Professions

**Topic:** Professions

**Objective:** To reinforce the different occupations in English and to induce this knowledge into Long Term memory.

**Skill focus:** The main skill focus is on lexical competence.

**Materials:** Pictures in which students can visualize the different sentences.

	KEYS WORDS	
SPANISH	ENGLISH	NEW WORD
Policía	Police officer	Station
Profesor	Professor	University
Fotógrafo	Photographer	Photo
Artista	Artist	Art
Autor	Author	Book
Mensajero	Messenger	Letter
Carpintero	Carpenter	Wood
Dentista	Dentist	Tooth
Inspector	Inspector	Security
Electricista	Electrician	Light
Chef	Chef	Food
Farmacéuta	Pharmacist	Medicine
Arquitecto	Architect	Construction
Violinista	Violinist	Music/Violin

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# Key words with Places

**Topic:** Places

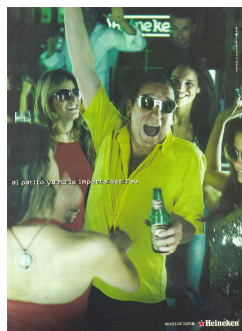
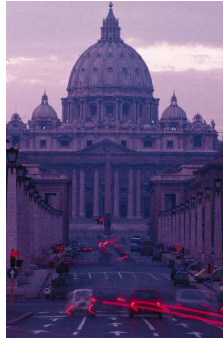
**Objective:** To reinforce the most important places in English and to induce this knowledge into Long Term memory.

**Skill focus:** The main skill focus is on lexical competence.

**Materials:** Pictures in which students can visualize the different sentences.

KEYS WORDS		
SPANISH	ENGLISH	NEW WORD
Cafetería	Cafeteria	Coffee
Academia	Academy	Study
Banco	Bank	Money
Gimnasio	Gymnasium	Exercise
Bar	Bar	Drinks
Circo	Circus	Clown
Hospital	Hospital	Medicine/doctor
Parque	Park	Amusement
Restaurante	Restaurant	Food
Universidad	University	Students
Prisión	Prison	Prisoner
Laboratorio	Laboratory	Doctor
Palacio	Palace	King
Rancho	Ranch	Farmer
Industria	Industry	Company

# Effect of Mnemonic Techniques



# Key words with Food

**Topic:** Food

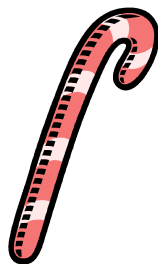
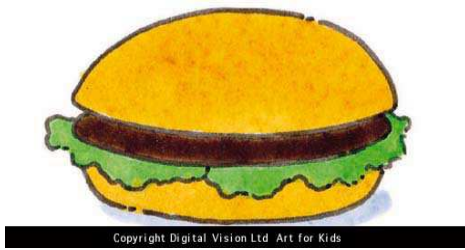
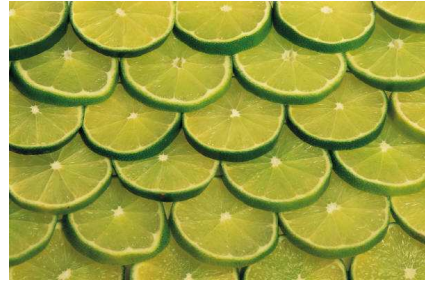
**Objective:** To reinforce the most common food and to increase the students' vocabulary in LTM.

**Skill focus:** The main skill focus is on lexical competence but at same time oral skills, written skills and listening

**Materials:** Pictures in which the students can visualize the different sentences

	KEYS WORDS	
SPANISH	ENGLISH	NEW WORD
Espagueti	Spaghetti	Cheese
Chocolate	Chocolate	Cake
Ensalada	Salad	Vegetables
Pudín	Pudding	Milk
Hamburguesa	Hamburger	Meat
Limón	Lemon	Lemonade
Puré	Purée	Potato
Café	Coffee	Cup
Caramelo	Caramel	Sweet
Té	Tea	Drink
Crema	Cream	Ice-cream

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# Key words with Adjectives

**Topic:** Adjectives (qualities)

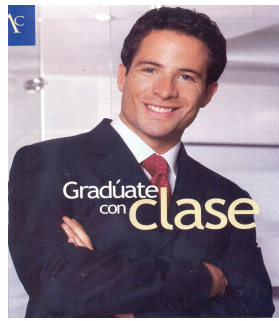
**Objective:** To reinforce some adjectives and to increase the students' vocabulary in LTM.

**Skill focus:** The main skill focus is on lexical competence but at same time oral skills, written skills and listening

**Materials:** Pictures in which the students can visualize the different sentences

	KEYS WORDS	
SPANISH	ENGLISH	NEW WORD
Inteligente	Intelligent	Brain
Ambicioso	Ambitious	wealthy
Amigable	Amiable	Friend
Criminal	Criminal	prisoner
Rico	Rich	Rich
Frágil	Fragile	Flowers
Elegante	Elegant	Ejective
Adorable	Adorable	Penguin
Famoso	Famous	Actor
Horrible	Horrible	Monster

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# Key words with Animals

**Topic:** Animals

**Objective:** To increase the vocabulary level, identifying some animals

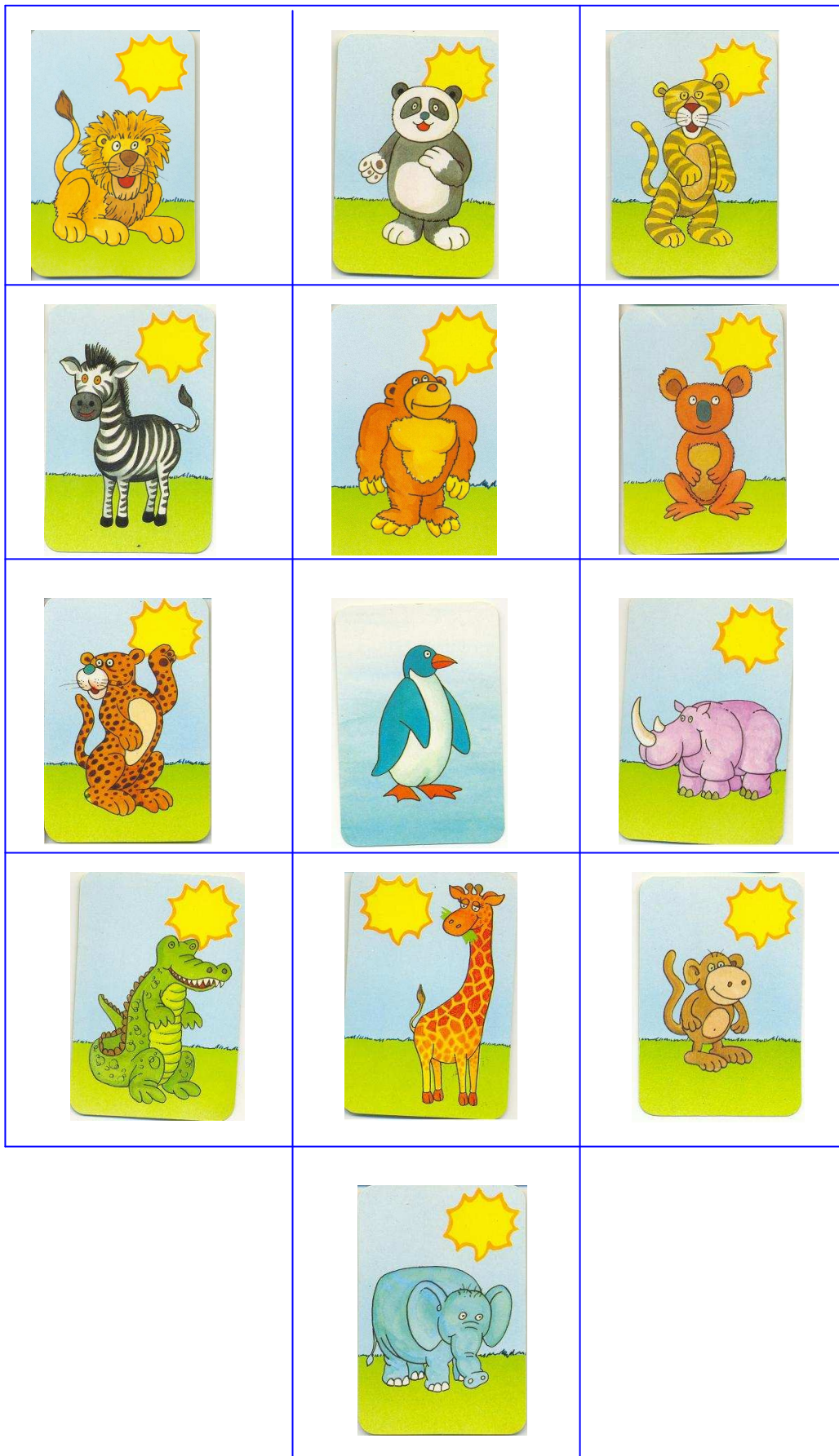
**Skill focus:** The main skill focus is on lexical competence but at same time oral skills, written skills and listening

**Materials:** Flaschcards in which the students observe different sentences

## KEYS WORDS

SPANISH	ENGLISH	NEW WORD
Elefante	Elephant	Ears
León	Lion	Hair
Cebra	Zebra	Lines
Tigre	Tiger	Teeth
Leopardo	Leopard	Spot
Panda	Panda	Bear
Gorilla	Gorilla	Mouth
Jirafa	Giraffe	Neck
Rinoceronte	Rhinoceros	Horn
Pingüino	Penguin	Beak
Cocodrilo	Crocodile	Nose

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# Key words with Verbs

**Topic:** Verbs

**Objective:** To increase the lexical competence, identifying some common verbs

**Skill focus:** The main skill focus is on lexical competence but at same time oral skills, written skills and listening

**Materials:** Pictures in which the students observe different sentences

## KEYS WORDS

SPANISH	ENGLISH	NEW WORD
Pintar	Paint	Wall
Poner	Put	Eggs
Observar	Observe	Microscope
Construir	Construct	Building
Ordenar	Order	Chief
Dirigir	Direct	Leader
Fotografiar	Photograph	Camera
Plantar	Plant	A Flower
Suplicar	Supplicate	Forgiveness
Capturar	Capture	Thief

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# Key words with House Objects

**Topic:** House objects

**Objective:** To increase the lexica competence identifying some objects of the house

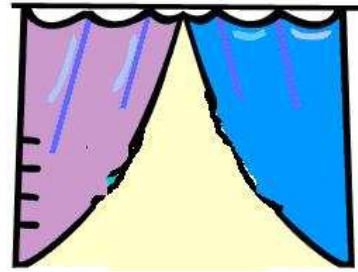
**Skill focus:** oral skills, written skills and listening

**Materials:** pictures in which the students observe different sentences

## KEYS WORDS

SPANISH	ENGLISH	NEW WORD
Refrigerador	Refrigerator	Ice
Estufa	Stove	Pot
Sofá	Sofa	Living room
Cortina	Curtain	Window
Televisión	Television	Channel
Computador	Computer	Programs
Flores	Flowers	Jar
Teléfono	Telephone	Talk

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# Key words with Musical Instruments

**Topic:** Musical instruments

**Objective:** To increase the lexical competence identifying some musical instruments

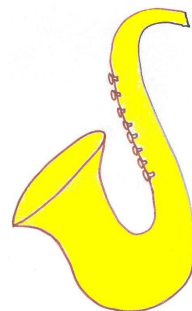
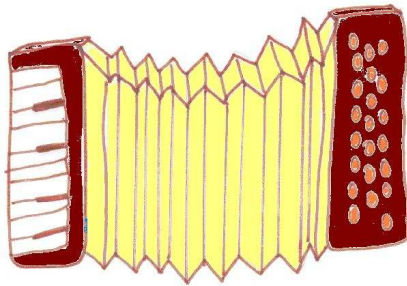
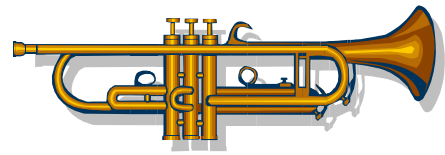
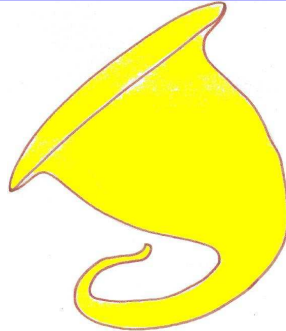
**Skill focus:** oral skills, written skills and listening

**Materials:** pictures in which the students observe different sentences

## KEYS WORDS

SPANISH	ENGLISH	NEW WORD
Guitarra	Guitar	Strings
Piano	Piano	Keys
Flauta	Flute	Blow
Trompeta	Trumpet	Golden
Saxofón	Saxophone	Music
Acordeón	Accordion	Buttons
Trombón	Trombone	Big

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# Key words with Sports

**Topic:** Sports





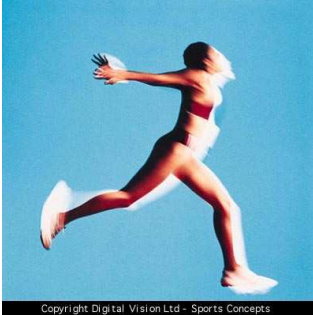



**Objective:** To increase the lexica competence identifying some sports that students know or have seen.

**Skill focus:** oral skills, written skills and listening

**Materials:** pictures in which the students observe different sentences

KEYS WORDS		
SPANISH	ENGLISH	NEW WORD
Tenis	Tennis	Racket
Fútbol	Football	Ball
Basquetbol	Basketball	Jump
Golf	Golf	Champ
Esquí	Skiing	Ice
Béisbol	Baseball	Helmet
Boxeo	Boxing	Gloves
Atletismo	Athletics	Legs

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