PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH
UNIVERSITY MOHAMED KHEIDER OF BISKRA
FACULTY OF LETTERS AND LANGUAGES
DEPARTMENT OF LETTERS AND FOREIGN LANGUAGES
FIELD OF ENGLISH

The Role of Effective Memorizing Aptitude in Enhancing EFL Learning.

A Case Study of First Year Pupils of Noureddine Abd Elkader Middle School

A Dissertation Submitted to the Department of Letters and Foreign Languages
as partial fulfillment for the Master's Degree in Sciences of the Language

Submitted by:

MOUADA SAMAH

Supervised by:

Mrs. BEN IDIR SAMIRA

Juin 2017

Dedication

I wish to dedicate my modest work to all my family:

-my parents who devoted their life to my education

- my brothers

-my aunt and her husband for their care

Special thanks are due to my husband for his intensive help and encouragement

Thanks to my friends for their moral support.

Acknowledgements

First of all, I am deeply grateful to my teachers and supervisors Mrs. BIN IDIR.SAMIRA and Mr. BECHAR.MAAMAR for their precious guidance, help and wisdom, without whom this work could not be achieved.

I owe a particular debt of gratitude to Mrs. SALHI AHLEM, and Dr. SAYHI HANANE. They have kindly read my thesis and made valuable comments and suggestions.

I am also thankful to all the children who participated with pleasure in this study.

My profound thanks to the middle school headmaster and teachers who were totally cooperative during my field study and who provided the adequate atmosphere to permit the achievement of my experiment.

Abstract

Our objective in this study is to investigate whether the Algerian middle school children who possess high mental abilities, in other words who are considered to own effectively good memorizing aptitudes, achieve high level in EFL learning. Since the problem we are faced with concerns the relationship between memory and learning English as a foreign language, the background ideas for our research have focussed on the theoretical foundations and results on memory and EFL learning studies. In this study we will assume that there is a relationship between memory and EFL learning, and that Algerian middle school children who have a good memory achieve higher level than those with poor memorization capacities. For this purpose, we used two tools; an interview with teachers of middle school which consisted of (10) questions. In addition to the interview, we used a test with two groups of an equal size. They are pupils of first year at middle school among a population of (120) children aged between (11) and (12). Both groups were constituted of boys and girls. A test consisted of series of memory tasks which has been constructed to allow the collection of sufficient data about the middle school pupils' memorization. From the analysis of our results of both tools, we have derived that, in accordance with what was expected by theoretical studies, children's school achievements seemed to have a strong relation with their memory abilities. This relationship can appear in terms of their abilities to quickly process the information, basically helped by their already acquired knowledge and previous experiences.

List of Tables

I)

II)

III)

List of Figures

I)

II)

III)

List of Abbreviations and Acronyms

EFL : English as a Foreign Language

STM : Short Term Memory

LTM: Long Term Memory

STS: Short Term Store

LTS: Long Term Store

WM : Working Memory

WMC : Working Memory Capacity

Table of Contents

General Introduction

Introduction

When talking about the cognitive abilities specificly memorizing aptitude and there effect on the EFL learning, this chapter will introduce the main elements of our study. The start will be with the statement of the problem and research question. In order to guide the work there is a hypothesis that will be answered through testing. Without forgetting the main aims of our study.

Statement of the Problem

One of the challenges in learning lies in memorizing the lesson, and meeting the appropriate technique to do that. Unfortunately, not all the learners have a clear idea about memorizing strategies which could be effective in learning languages and specially learning English as a foreign language. So the problem we are faced with concerns discovering the main memorization strategies and their influence in enhancing EFL learning.

Research Questions

Since the study is about memorizing aptitude and its effect on EFL learning, the main question that should be asked is:

In terms of memorizing aptitude, is there any significant differences concerning high and low proficiency in EFL learning between the learners. In other words: Can we consider a middle school pupil with good memorizing aptitude as a good learner?

Supporting questions include:

- What is meant by memorizing aptitude?
- What are the common memorization strategies which are mostly used by EFL learners?

- Can we consider memorizing aptitude alone enough to learn English as a foreign language? Or is there another cognitive ability?

Hypothesis

In this study, it is hypothesized that, in terms of memorizing aptitude, there are significant differences concerning high and low proficiency in EFL learning between the learners. That's to say that memorizing aptitude plays a great role in enhancing EFL learning.

Aims of the Study

The present study is intended:

a) To show if the cognitive abilities affect learning.

b) To investigate whether there is a relationship between memorizing aptitude and school achievements in EFL learning. In other words whether pupils who own effective memorizing aptitude can be considered as successful learners.

Methodology and Research Design

In order to assess pupils' cognitive abilities, and then to test the hypothesis stated previously, we will depend on the mixed research as a type, but with a focus on the quantitative one. A memory test will be administered. It composes of questions that intend to establish the memorizing level rating by measuring the (1^{st}) year middle school pupils' cognitive abilities. We have tried to select an effective intellectual test that is appropriate to the participants' age, cultural and educational environment. It is important to mention that this test is designed to facilitate the task because the pupils are at early levels of proficiency in English and it focuses on how strong or weak the memory of the pupils is. The test's aim is to assess their ability to memorize.

In addition to the test, we will have an interview with a group of teachers concerning their learners' level in English, and what are the other factors that could affect their memory and their cognitive abilities.

This study aims to find out whether there is a relation between effective memorizing aptitude and EFL learning. To relate it with learning and achieving in English as a foreign language we compare the findings with the exam marks that the pupils will have in English.

Significance of the Study

This study will be a significant endeavor in showing whether the cogntive abilities influence the learning process. This study will also be beneficial to the students and teachers in their classroom when they practise effective learning with setting particularly different concepts related to the use of effective cognitive abilities. By understanding the needs of the students and benefits of memorization strategies, teachers and students will be assured of good school achievements. Moreover, this research will provide recommendations on how to improve the performance of a learner in accordance to memorizing aptitude.

Moreover, this study will be helpful to the teaching learning process in enhancing and improving learning English as a foreign language. It will also serve as a future reference for researchers on the subject of cognitive abilities and learning. And importantly, this research will educate learners in deciding which memorization strategy e.g. Graphic Organizers is really fulfilling its role in remembering an information.

Population of Interest

The participants in this study are about (11-12) years old. They are pupils, from both gender, who attend an Algerian middle school in Elhaouch–Sidi Okba, Noreddine

Abd Elkader, in their first year. They have all studied in normal education classes. A sample of pupils was selected to be tested for their memorization and their achieving in English as a foreign language.

Structure of the Study

This study is organized into two parts. The first part consists of two theoretical chapters that support the practical application part. The latter includes a chapter which deals with the field work.

The General Introduction talks about the main studies and investigations concerning this research, in addition to the main aims of our study, the questions that should be answered, the methodology and research design, without forgetting the population of interest

Chapter one is about Memorizing Aptitude. As a first subtitle we will talk about Memory. It is devoted to the exposition of the most influential types of Memory without forgetting to mention the Working Memory and forgetting. As a second subtitle we will talk about: Memorization. What will be mentioned in this part is the definition in addition to the main techniques and strategies which help in memorizing any information in any subject and how it affects language learning. As a third subtitle there is Intelligences. It starts with some definitions, then its relation to school achievement.

Chapter two offers a theoretical framework that helps define the learning concept and provides information about the different learning theories dominating the education field at the present time. As a final point to be discussed there is Assessment in EFL Learning.

The third chapter is devoted to the field work of this research. It covers the method, the population, data gathering tools, administration of the tools, data analysis and summary of the results.

Conclusion

In this part we have stated the statement of the problem, and we've hypothesized that the effective memorizing aptitude enhances and improves learning English as a foreign language. As an addition to that, we have precised which method and which tool will be used in our work, the tools are an interview with teachers of English at middle school. Also it has been mentioned the population which we will depend on to do our study, we have chosen first year pupils from Noreddine Abd Elkader Middle School.

All what has been mentioned in this part will be detailed with more information in the following chapters.

Chapter I. Memorizing Aptitude

Introduction

Talking about the school achievement and the range of difference between the marks of the learners, lead us to make a study concerning the relation between the cognitive abilities and the learning process in order to find out the reason. Among those abilities that the human has, we will focus on the memorizing aptitude. There are three main points to be explained: memory, memorizing and intelligence.

Memory

Definition of Memory

"I have a terrible memory!" an expression that we have heard in many casual conversations, but do we really know what does the word memory mean?

- From the etymological part: the modern English word "memory" comes to us from the Middle English *memorie,* which in turn comes from the Anglo-French *memoire* or *memorie,* and ultimately from the Latin *memoria* and *memor*, meaning "remembering". (Oxford Advanced Learner's Dictionary, 2005)
- From the physiological part: a set of encoded neural connections in the brain. It is the re-creation or reconstruction of past experiences by the synchronous firing of neurons that were involved in the original experience. (E.Basar, 2004)

Memory is generally about remembering past experiences which affects the current behavior and helps us to make predictions on the future based on what happened before. It is a mechanism that acquires, stores, retains and subsequently retrieves and recalls information. That's to say the information (could be: experiences, impressions, skills and habits) must be successfully encoded (i.e. capable of being used), after that stored in the brain, and as a final process the information is recalled to mind. That's how memories are formed.

From the previous definition and according to Tessie J. Rodriguez, D.M (2009) we find that there are four main stages of memory.

- **Encoding:** Is the first process in which the stimulus is sensed and transformed into an understandable form for the brain.
- **Storage:** The stimulus that has been encoded before will be stored in a memory area only when attention is focused on it.
- **Retrieval:** Or recall. In this stage, the stored memory is retrieved from the memory area to influence currant behavior.
- **Restorage:** When we finish using the memory and to avoid losing it, memory must be restored in the brain especially in its area.

The Three Stage Views of Memory

Since memory is related to remembering information, we can find that according to Donnalyn Yates (2001) there isn't only one type but in fact there are others, because; this information can be back to a second, an hour, as it can be back to years ago. In this figure we briefly sum up the three memory stores.

Memory type	**Amount of data**	**Duration**
Sensory STM LTM	Very large limited very large	Very short Short Very long

Table 1. *Different types of memory systems.* Source *(Jordan. A et al, 2008: 44)*

Now we start Memory types with the sensory store.

The sensory store

If you are asked to try for a short moment of time to imagine your life without your senses, imagine that you can't hear, can't see, can't smell, taste or even can't feel. Thinking about that is certainly a little bit hard if it is not impossible for you and probably

it would seem to be a strange idea for you, but it is the simplest way to convince you of the high importance of sensations.

Sternberg defines a sensation as "*a message that our brain receives from our senses*". So according to scientists the sense is a system that collects information from the world for the brain. In memory, sense is used in the encoding stage when some stimuli are brought to the brain through one of the five senses. That's what we call the sensory memory; this type of storing information last for very brief periods of time. Generally it lasts for a half of second, but for some it may last as long as 2 seconds.

Talking about sensory memory leads us to mention its systems which are included in an intimate way:

- **Iconic memory:** for the visual stimuli. Here the information is stored for less than one second.
- **Echoic memory:** for aural stimuli. Its duration is 3 seconds.
- **Haptic memory:** for touch. It lasts a bite longer than the previous ones.

Sensory memory is the initial stage of recording only if it is done without focus attention. If not, the information will pass to the next stage which is Short-Term Memory (STM).

The Short-Term Store

The development of the Short-Term Memory theory was revolutionary, because; it had enormously influenced ideas in psychology and played a crucial role in some modern theories. The first one who introduced the theory of Short-Term Memory was Broadbent in1958. Than in 1969, Waugh and Norman, brilliant scientists came with a new formulation of the theory (Anderson, 1995). However, the theory knew its most systematic development thanks to Atkinson and Shiffrin (Atkinson and Shiffrin, 1968).

Short Term Store comes in the second place after the Sensory Store, and just like what we have mentioned before the information passes to this stage with a focus attention. Its period of time is somewhat longer but still with limits. In this case the length of time depends on whether it undergoes rehearsal and repeated sensation or not, so the information could be kept from few seconds up to one minute or two.

As it has been mentioned before, the information will pass to the next stage which is Short-Term Memory (STM).That's to say series of sensory registers (what has been received by the five senses) which are micro-memories form the Short-Term Store.

The Long-Term Store

When people generally say that this person has a good memory, they mean that he doesn't forget things happened in the past, and this is what meant by Long-Term Memory. This represents that the person stored there large amount of information in his brain for considerable periods of time, and sometimes for an unlimited or unspecified period of time (Baddeley, 1998).

For the information that could be in this store, there are: remembering one's own name, how to speak, the last holiday, could be even the place where the person were in the last five minutes. So any and every information which is stored for more than the capacity of two minutes will last for a very long period of time. That's what made the Long-Term Store unlimited, and relatively permanent system.

In previous discussion, we have mentioned that the item will reach the LTS. This can happen through two ways:

- Rehearsal or over learning of that material.
- Consciously dealing with the information to comprehend it.

We can assert that in daily life almost everything we learn involves meaningful material and very little of our learning is nonsense. Recently, things have changed and

nonsense syllables have been replaced with real words. Needless to say those words are not considered to be alike, that's why we behave with words differently. To explain semantic coding, there is a way which can be used: test words that carry a semantic relationship to other test words.

William Bousfield (1953) made an experiment to investigate the effect of categorical organization on the recall of words. He gave (60) words in an unorganized structure, and he asked the subjects to free-recall the words. Most of them had organized them into categorical clusters. That's to say that we can remember words or information by *grouping them into categories* (Baddele, 1998).

In order to sum up the three stage views of Memory, Atkinson and Shiffrin (1968) proposed the following model.

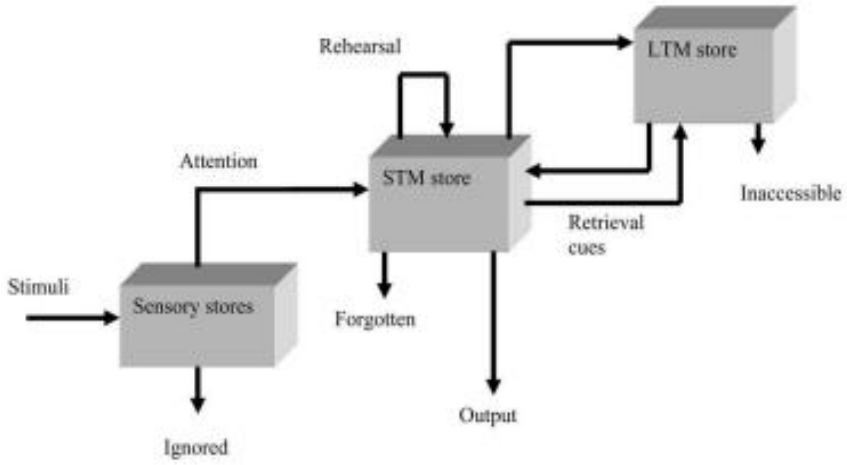


Figure 1. *Modal model of Memory.* Source *(Atkinson & Shiffrin, 1968, cited in Jordan.A et al, 2008, p.45)*

In this figure, external data goes into the sensory stores before entering the STM store. Selected information is transferred from the sensory memory stores to STM. It can be transferred to LTM stores. Otherwise it will be forgotten.

Definitions of Working Memory

When talking about cognitive psychology we cannot neglect WM. Its studies goes back to a long time. Though that, researchers have not reached yet an agreement about what is WM. The complexity of WM stand aginst precising definition of this concept, that what have Denis Alamargot and Lucile Chanquoy (2001) mentioned in there book '*Through the Models of Writing*':

"Logie (1996) distinguished seven different definitions of WM :

- (1)"Comptemplation" (Locke, 1690).
- (2) "Primary Memory" by James (1905).
- Waugh and Norman (1965) have defined this concept by its (3) "Limited Capacity of Storing " and temporary maintaining of information.
- A more complete definition has been provided by Atkinson and Shiffrin (1968) who, through the concept of Short Term Memory, have introduced some control processes (strategy for coding and retrieving information) added to temprary information upholding processes (rehearsal). According to this idea, Short Term Memory is considered as a 'unique and flexible system', ensuring the storage as well as the strategic processing of information.
- A fourth idea of Working Memory, conceived by Craik and Lockhart (1972) and opposed to the previous one, relies on the notion of (4) " Processing Depth". According to Logie (1996), these authors have rather approached Working Memory as a processor that more or less emphasises the processes than as a real structure of memory.
- A fifth definition of Working Memory has been more recently proposed by Just and Carpenter (1992), who consider Working Memory as specialised in language processes. Acoording to this " Capacity Theory", Working Memory would be

mainly constituted by a (5) "Pool of Cognitive Resources" (an activation pool) that it is necessary to share between the different processes, for example, of reading and comprehension. The central point of this approach is that the allocation of resources to a given process wold operate to the detriment of resources allocated to another process.

- A sixth idea of Working Memory relies on narrow relationships that this concept maintain with Long Term Memory. Working Memory can be conceived as an (6) " Activated Zone of Long Term Memory" (Cowan, 1993; Anderson, 1983 a and b), or as completed by an interface between Long Term and Working Memory, which allows Working Memory to strategically extract from Long Term Memory knowledge necessary for a given task. This interface, recently discussed by Ericsson and Kintsch (1995) is called Long Term Working Memory.
- Finally, Bddeley (1986,1990) has provided a seventh and last definition of Working Memory, it is different from the preceding ones since it approaches Working Memory as a (7) " Composite System of Modules" with three main components, dedicated to process different pieces of informationn (visuo-spatial and auditory), and each characterised by specific storing and/or processing capacities."

Since Working Memory has not one definition, researchers took different angles when defining WM such as : content, structure, function, or a combination of these perspectives (Miyake & Shah, 1999).

Content : Lovett et al. (1999) define it as a group of activated declarative knowledge nodes, which included both task-relevant and task-irrelevant information.

Structure : Baddeley (2002) proposed that WM was composed of a phonological loop, a visuospatial sketchpad, an episodic buffer, and the central executive.

Function : Researchers discussed two main categories: storage and executive control. They agree that WM has a storage function and use working memory capacity (WMC) to represent the amount of information activated and retained while completing cognitive tasks.

Syntheses of WM definitions : Accoring to Miyake and Shah (1999), WM represents all processes and mechanisms involved in activation of task-relevant knowledge in LTM, activation maintenance, and coordination and regulation of these processes.

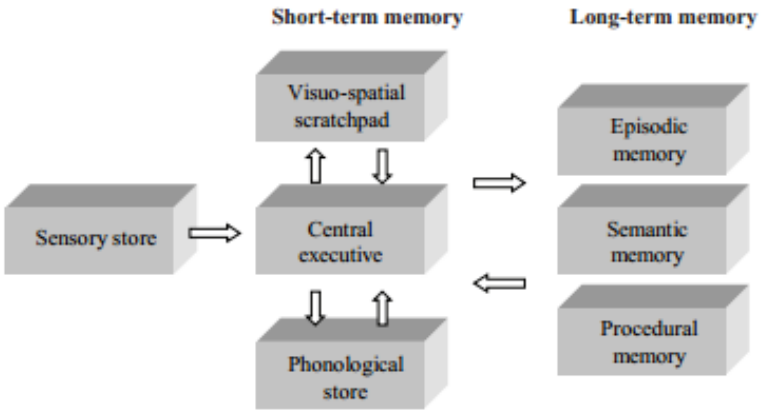


Figure 2. *Working Memory model.* Source *(Baddeley and Hitch, 1974, cited in Jordan.A et al, 2008, p.46)*

Baddeley and Hitch (1974) proposed this more dynamic model which sum up what is Working Memory, it was further developed by Baddeley (1986, 2001). The working memory model consists of three parts: the central executive, the phonological loop and the visuospatial scratchpad.

Overview on Forgetting

When the learner says : "*I have a fish memory, I forget even the simple word* ", we find that memory and forgetting are pairs of words that goes togather. It’s not possible to talk about one term and neglect the other.

Why do we forget even simple information? To answer this question we need to examine the word *"forgetting*". As a term it has a relation with (STS). It's when the items such as : date of event, name of a person, and others are effortlessly lost forever after a brief period of time. This is because the Short-Term Store is limited. Since new information are always coming in and push out old information from the limited (STM) (Andrson,1995) unless the item reaches the Long Term Memory by rehearsing and repeating , in this case it will not be forgotten, researchers and psychologists deeply investigated the area. As a result, many theories concerning this term have been proposed by groups of scientists arguing and claiming the effectiveness of theirs. The two most distinctive theories are "interference" theory and "decay" theory. "Interference" refers to competing information causing us to forget something, and "decay" refers simply to the passage of time causing us to forget.

How can we keep ourselves from forgetting? In order to pass the information from the STS to LTS, the learner needs to remember it, and the way to that is by memorizing through specific strategies.

Memorization

Definition of Memorization

"I forgot." ..."I can't remember that." ..."I sit down to take a test and my mind goes blank."

When people forget important things specially students when they don't do well in tests and exams, they use such expression or others that are similar in meaning. Here the learner needs to use his / her brain to recall the information and remember it. This ability is called memorizing aptitude.

According to dictionaries :

- Cambridge Advanced Learner's Dictionary & Thesaurus © Cambridge University Press): memorize UK /ˈmem.ə.raɪz/ US /ˈmem.ə.raɪz/, as a verb is : to learn something so that you will remember it exactly.
- Oxford Advanced Learner's Dictionary (2005), "Memorizing is to learn something carefully so that you can remember it exactly."

According to studies :

- Richards, Platt, and Platt (1992, p. 226), believe that "Memorizing is the process of establishing information in memory. The term 'memorizing' usually refers to the conscious processes".

What can be understood from those words is that the process of memorizing is done by the learner consciously. In other words the brain needs to be involved and thinking must be present when applying memorizing.

Memorization Strategies

We have noticed that some things are easy for the learner to be remembered while others are difficult, and that's a normal thing for everyone. The good news here is that there are different strategies which help in learning how to memorize important information .The strategies are introduced by Linda Bress Silbert, Ph.D. And Alvin J. Silbert in addition to (Aaron Williamon, ,2004):

- **Chunking :** It is when the learner break the information into small chunks. He may not realize that he is using specific strategy but actually he does. The learner use it for example to remmember dates of spacial events in history. It is easier to

remember things when the learner chunk them into groups. This strategy is not for numbers only but for words and other types of information. This could be by chunking foreign language by grouping words into categories or by parts of speech.

- **Understanding :** Sometimes the learners try to memorize a lesson by heart and they fail in doing that, the main reason is because they didn't understand the lesson first. That's to say , before attempting to memorize any information the learner needs to link what he is learning with what he has experienced in order to understand and to facilitate memorization.
- **Graphic Organizers :** This strategy consists of using graphics to organize information.This helps the learner to have a global view of what he is trying to learn. As a suggestion the learner may use a web when talking about one topic with details.
- **Visualization :** To explain tis strategy, it would be better to give an example first. Imagine lesson is about a story, here the learner will try to have an image in his head without actually having a look at its pictures or video. Visualization can help to learn almost anything in different topics.
- **Association :** Association as a word means making connection and as a strategy of memorizing means to connect the information with something in the learner's life that could be a person, a place, a situation or feeling… . in this strategy the learner needs to write the information then write the thing which has any strong association to help in remembering the meaning of each word. The next figure is an example of using Association.

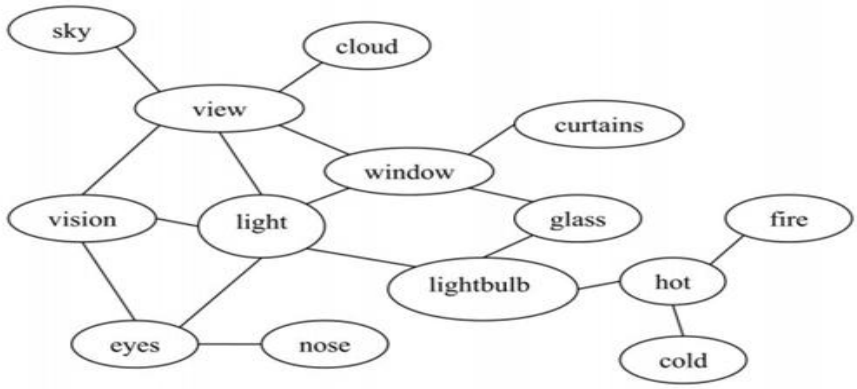


Figure 3. *Associative network.* Source *(A.Jordan et al ,2008 : 48)*

- **Rhyming :** The best example that should be mentioned is when teaching the ABC song to learn the English Alphabet. Rhyming is used to facilitate memorizing and learning for different lessons, that's why we find that our inspectors encourage using this strategy in TD sessions in middle schools.
- **Talking :** It is an easy strategy to use. All what the learner need to do is talking about the new information to memorize it. Here the learner can make a debate about it with his friends in the classroom or outside of it. Not only with his friends but also with his familly or with others who have an idea about the topic.
- **Storytelling :** What prooves that this strategy is effective is the use of stories with children. Any lesson and any moral thym that as an adult whant to pass it to the child it should be through a story. As a learner using this technique is usefull too. Here the learner need to focuse on the key events then arrange them in a logical way and as a final step the learner writes the story basing on those information. It is a great strategy to help remembering information in different subjects.
- **Writing Sentences :** "My Very Excellent Mom Just Served Us Nine Pizzas" who can forget this sentence which is used to remember the planets.Each first letter from each word represent a planet (we should mentioned that « P » does not exist

anymore because Pluto is no longer considered as a planet). In other words, this strategy is based on writing sentences using words that begin with the first letters of the items.

- **Acronyms :** The previous strategy is about writing a sentence using words with the first letters, however ; this one is about writing a word using the first letters of a list of words. It's an easy and a funny way, and the learner will probably remember the information forever. Here is an acronym which refers to an organisation : **UNESCO** stands for the **U**nited **N**ations **E**ducational, **S**cientific and **C**ultural **O**rganisation.
- **Rehearsing :** In order to memorize an information, the learner needs to practice what is new for him. Teachers may use this strategy with students when teaching them how to present themselves. The teacher will start by himself/herself and the learners will repeat.
- **Playing Games :** « Tell me and I forget, teach me and I may remember, involve me and I learn ». according to Benjamin Franklin, to learn something the student need to be involved, need to be a part from the scene. When the learner play a game and has funn during that, he will learn and remmember the information even unconsciously. This is noticed with childern when they play games, they learn new vocabularies, such as : start, end, congratulation…in addition to others, without an enttention to do that.

The Beneficial Effects of Memorizing

Pudwa (2005) believes in the principle that "you can’t get something out of a child’s brain that isn’t in there to begin with." In many studies, the role of memorization has been underestimated. In fact memorization can be considered as a technique which can

supply a linguistic foundation for the child. Adamson (1990) focuses on the fact that "English learners use memorization in different ways, ranging from learning to coping with assignments or exercises". In addition to them Oanh (2006) made a study to investigat the role of memorization, the result was that some English learners practice memorization as a normal thing. And this is what helps them in learning English. That's to say, according to Oanh (2006) memorization leads to the natural production of the learned expressions.

Cook (1994) too did not deny and has also stressed the role of memory in analyzing 'chunks' of language, in using repetition of set phrases, rituals, stories, and rhymes, in many of which there is neither meaning nor purpose and yet the child learn. According to Boyle (2004), This is similar to the belief of Islamic educators who puts memorization as "the first step in a life-long enterprise of seeking understanding and thus knowledge".

Boyle cites Al-Ghazali who pointed out that memorization of the Quoran may be the first step to learning it but that does not necessarily mean that comprehension is excluded: "[the] creed ought to be taught to a boy in the earliest childhood, so that he may hold it absolutely in memory. Therefore, the meaning of it will keep gradually unfolding itself to him, point by point, as he grows older. So, first, is the committing to memory, then understanding, then belief and certainty and acceptance."

Briefly speaking, Memorization makes progress and plays a great role in languag learning and according to Alieh and Atefeh Nasrollahi-Mouziraji (2015) it :

1) Provides the learner with linguistic data.

2) Is the first step to understanding.

3) Enhances association in memory.

4) Causes cognitive development as a learning strategy.

5) Helps noticing.

6) Provides rehearsal.

7) Is especially helpful in early stages of learning.

Since we are talking about memorizing strategies which help the learner in remembering any kind of information, a degree of intelligence is needed to know which strategy or technique is the most appropriate one to be applied. This idea will be explained in the next point.

Intelligence

Definition of Intelligence

"Viewed narrowly, there seem to be almost as many definitions of intelligence as there were experts asked to define it." R. J. Sternberg

Intelligence known by everyone, but can anyone define it? Long history of research and studies, but still no standard definitions of Intelligence.This what have leaded some researchers to believe that this term may be approximately described, but cannot be fully defined. It is true that Intelligence is a controversial topic with varrious definitions and strong disagreement, but what have been noticed is that there are some similarities between many of them. Here is what the term Intelligence could mean:

- "The ability to learn, understand and make judgments or have opinions that are based on reason" Cambridge Advance Learner's Dictionary, 2006.

- "The ability to acquire and apply knowledge and skills." Compact Oxford English Dictionary, 2006.
- "We shall use the term 'intelligence' to mean the ability of an organism to solve new problems . . ." W. V. Bingham.
- ". . . a quality that is intellectual and not emotional or moral: in measuring it we try to rule out the effects of the child's zeal, interest, industry, and the like. Secondly, it denotes a general capacity, a capacity that enters into everything the child says or does or thinks; any want of 'intelligence' will therefore be revealed to some degree in almost all that he attempts;" C. L. Burt.
- "The capacity to learn or to profit by experience." W. F. Dearborn.
- "Intelligence is the ability to learn, exercise judgment, and be imaginative." J. Huarte.
- "Achieving complex goals in complex environments" B. Goertzel.
- ". . . the ability to solve hard problems." M. Minsky.
- a report which was published by the American Psychological Association (Steen Leleur, 2012 : 66)

> Individuals differ from one to another in their ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought. Although these individual differences can be substantial, they are never entirely consistent: a given person's intellectual performance will vary on different occasions, in different domains, as judged by different criteria. Concepts of

"intelligence" are attempts to clarify and organize this complex set of phenomena. (Neisser et al. 1995).

This definition focuses on four key concepts which can be illustrated in the following figure:

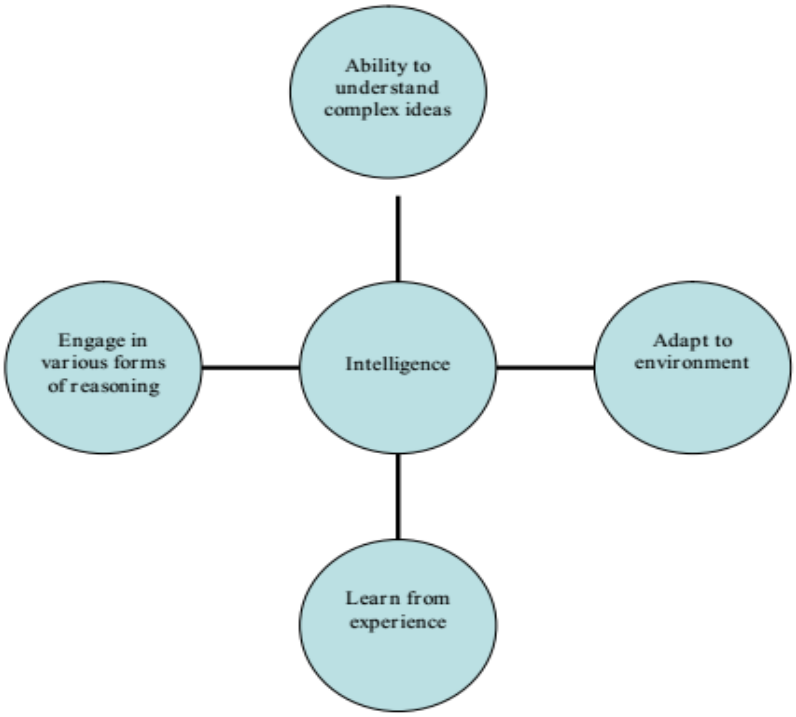


Figure 4. *Intelligence : Knows and Unknows.* Source (*Neisser, U et al, 1996, p. 77)*

Intelligence and School Achievements

A considerable debate has been made concerning the relationship between intelligence and academic achievement. Some researchers view that intelligence and achievement are completely constructs. In fact, intelligence and academic achievement tests often contain some items or tasks that appear are taught in school and have relation with academic achievement (i.e., vocabulary, arithmetic, etc…). Ceci (1991) asserts that, "the contents of achievement tests and the contents of so-called intellectual aptitude tests as they are currently constructed are highly similar and inseparable both theoretically and statistically" (p. 708). This apparent overlap in test coverage, among other factors, has led psychologists to view intelligence and achievement as identical constructs. Others believe

that the relationship between intelligence and achievement is reciprocal, mutually influencing each other (Brody, 1997).

A lot of studies have been done concerning the relationship between Intelligence and School Achievement. Those studies ended with a test called IQ. In 1989, the American Academy for the Advancement of Science listed the IQ test among the twenty most significant scientific discoveries of the century, and it was proved that the IQ is effective in making the distinction between students who have the ability to succeed in regular classes and those who were mentally challenged and they are not perfect predictor of academic success. In other words, it would be effective to use a test of Intelligence to classify the learners to academically successful ones and non successful.

Conclusion

The cognitive abilities do play their role. The learner should be aware of the effective memorizing aptitude that should be used in order not to forget it and lose it. Choosing the appropriate strategy and remembering the knowledge may help in achieving good level in EFL learning. Reapiting the term ‘Learner’ and ‘Learning’ in several expressions led us to ask the question: what does Learning mean? The next chapter will provide us with enough information to make the term clearer.

Chapter II. Learning

Introduction

This chapter provides an explanation of ‘Learning’ as a terminology. In addition to that, and in the light of educational philosophy, the major learning theories will be discussed. What is known too is that during each year and each teaching learning process the pupils’ progress should be measured through assessing which will be discussed as a final part in this chapter.

Definitions of Learning

According to dictionaries:

- Oxford : The acquisition of knowledge or skills through study, experience, or being taught.
- Cambridge Advanced Learner’s Dictionary defines the word ‘learn’ as:

  1- To get knowledge or skill in a new subject or activity.

  2- To make yourself remember a piece of writing by reading it or repeating it many times.

  3- To start to understand that you must change the way you behave.

  4- To be told facts or information that you did not know.

According to websites:

1- Learning is eruditeness: profound scholarly knowledge.

2- Learning is a change in neural function as a consequence of experience.

3- Learning is the increase in the amount of response rules and concepts in the memory.of.an.IS. (Intelligence.System).

4- A relatively permanent change in cognition, resulting from experience and directly.influencing.behavior.

5- A process of ADAPTATION by which a set of adjustable parameters is automatically modified so that some objective is more readily achieved.

6- Learning is an increase in the capability for effective action. Individual, team, and organizational learning can all be measured by the outcomes that result from effective action.

7- The process by which experience brings about a relatively permanent change in behavior.

8- (A) To integrate, assimilate or incorporate "news" in an already internal cognitive structure.

(B) Act of perception, interaction and integration of an object by a subject, acquisition of knowledge or development of skills or attitudes.

9- Gaining knowledge or skills, or developing a behavior, through study, instruction, or experience.

According to researchers:

- According to Gow and Kember (1993), the following points subsume the majority of approaches to learning:
  - ✓ Aquantitative increase in knowledge
  - ✓ Memorization
  - ✓ The acquisition of facts and procedures which can be retained and / or used in practice
  - ✓ The abstraction of meaning
  - ✓ An interpretive process aimed at the understanding of reality

Nevertheless, we believe that there are some elements which should appear. They are the following:

1-Curiosity

2-Experience

3-Knowledge/skills

4-Memory

5-Eruditeness

6-Effective.action.and.creativity

7-Curiosity (once again)

If we illustrate the above elements in the form of a diagram we can get the following

figure:

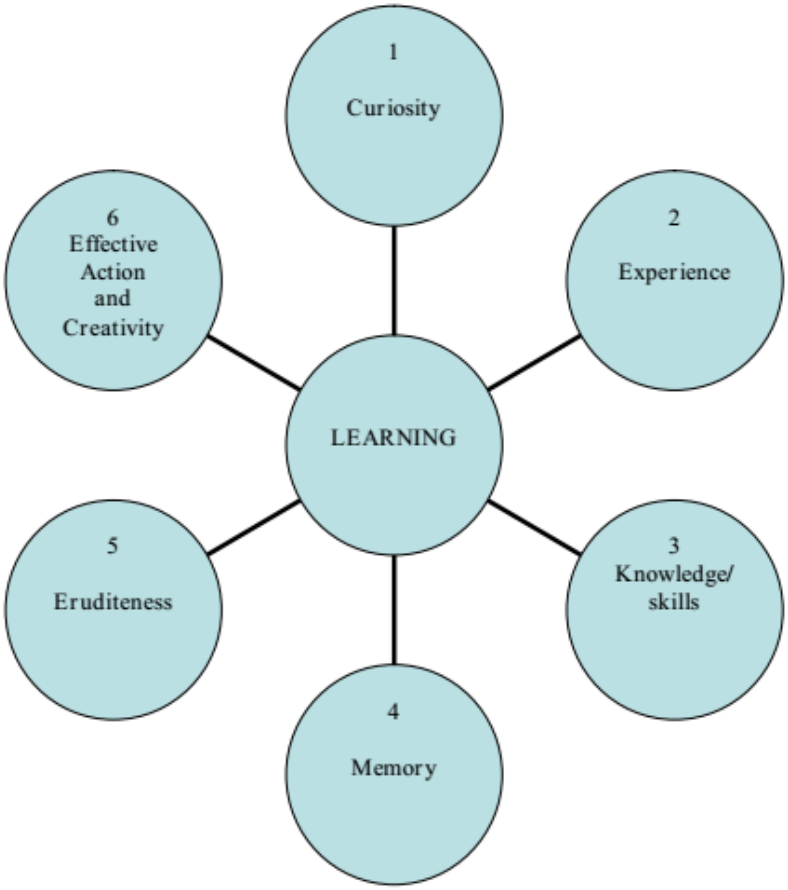


Figure 5. *Learning definition*

It is worth mentioning that such a ranking is like a cycle that never stops evolving. It starts with curiosity, ends with effective action and creativity then starts again with curiosity to know and create more.

Ways of Learning

Theories on how people learn are numerous and varied. Under this title we will mention the main ways and mains views of learning.

Learning and the Behaviorist View

Before discussing this view and its relation to learning. It is necessary to answer first this question: what is behaviorism?

A.Jordan, O.Carlile and A.Stack (2008)

> Behaviourism is the most influential and generalizable theory of learning that claims a scientific basis. This is because, like the most useful theories in any field, it is universal and underpinned by only a few principles. As its name suggests, it concentrates on behavioural changes in organisms. Thus, behaviourists define learning as a relatively permanent change in behaviour as the result of experience. This change in behaviour is always observable, with some behaviourists proposing that if no observable change happens, no learning has occurred.

We can sum up this definition in saying that behaviourism is interested in human and animal behavior. It claims three truths:

1- Psychology is the science of behavior, not the science of mind.
2- Behavior is to be described without making any reference to internal psychological processes or mental events. Therefore the sources of behavior come from the environment (external) not from the mind.

3- Any mental term or concept deployed in describing behavior should be eliminated and replaced by behavioral terms.

In terms of learning, four key principles come to the fore: (James Hartley 1998)

1- Activity is necessary and important: learning is more efficient when the learner is active, fully involved, rather than passive. 'Learning by doing' is an example.
2- Repetitions and generalizations are so important: frequent practice and practice in varied contexts are necessary for learning to take place. Frequent practice is a prerequisite for skills acquisition.
3- Reinforcement is a great motivator: rewards and successes (positive reinforcers) are preferable to punishments and failures (negative events).

Learning is more efficient when objectives are clearly stated: activities in a given lesson are framed by behavioral objectives. E.g. 'By the end of the lesson students will be able to …'

We can't talk about behaviourism without mentioning Pavlov's classic experiments with dogs which are well known Pavlov's classic experiments with dogs which are well known. Pavlov noted that the smell of food caused an 'unconditional response'. It stimulates dogs to salivate. This is because the dogs reacted naturally to the food (the 'unconditional stimulus'). Pavlov began ringing a bell (a 'conditional stimulus') immediately prior to providing the food, and discovered that after a certain number of repetitions, the bell alone was sufficient to cause salivation.

This figure illustrates what have been explained above :

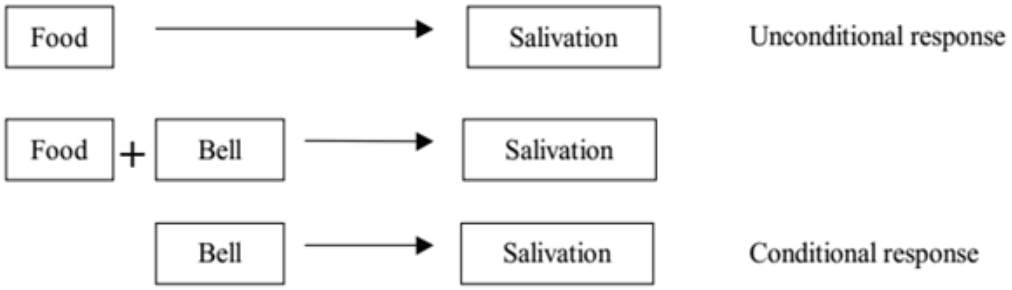


Figure 6. *Pavlov's classic experiments with dogs*. Source *(A. Jordan et al, 2008 : 22)*

After Pavlov, the American psychologist Edward Thorndike introduced a new theory of learning which focuses on the role of experience in strengthening or weakening a stimulus–response bond (Thorndike 1911). This theory is Reinforcement. Then we find Burhaus Frederic Skinner is the best-known psychologist in the US behaviourist tradition. He found that the link between stimulus and response gradually becomes weaker and subsequently dies. That's why he used therms : reward and punishment. Types of reward and punishment are shown in Figure 7(2.1)

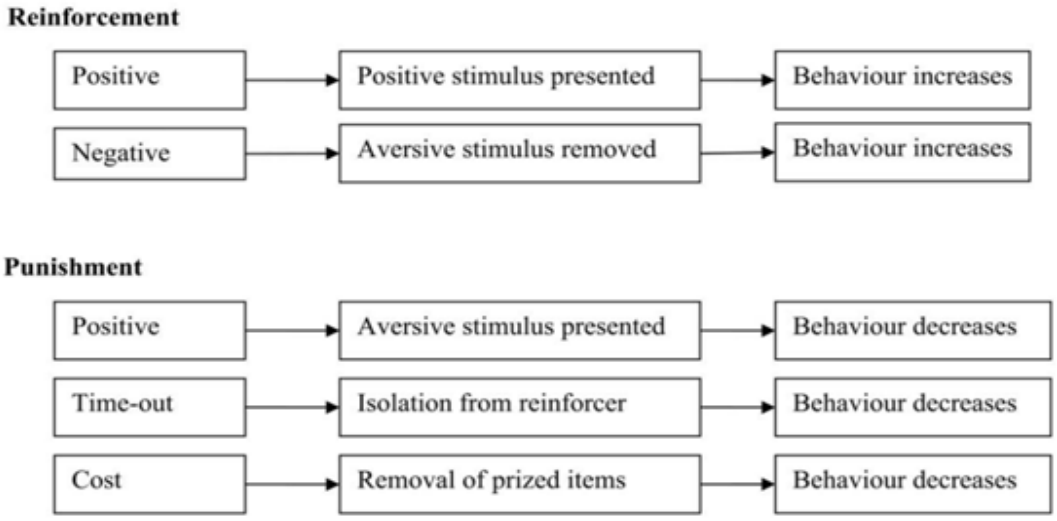


Figure 7. *Reinforcement and punishment.* Source*: Oates et al. (2005: 55).*

Learning and the Cognitive View

As a reaction to behaviorism, strong criticism came from Gestalt psychologists (Gestalt meaning pattern or configuration in German).The behaviorists have put much focus on single events, stimuli and overt behavior. For them, perceptions or images should be approached as a pattern or a whole rather than the sum of the component parts. While the behaviorists' focus was on the environment, Gestalt theorists turned to the individual's mental processes. Their concern was cognition – the act or process of knowing.

Drawing out some of the key principles of learning associated with cognitive psychology, James Hartley (1998) quoted: "Learning results from inferences, expectations and making connections. Instead of acquiring habits, learners acquire plans and strategies, and prior knowledge is important." The principles Hartley identifies are:

- Instruction organization: to be easier to learn and to remember, materials should be well organized.
- Instruction structuring: subject matters should have inherent structures. Key ideas and concepts should have logical relationships. These would link the parts together.
- The task and its perceptual features: the way a problem is displayed is important if students are to understand it. This is so because different aspects of the environment are attended selectively by learners.
- Individual differences: they are very important since they affect directly learning.
- These differences are often in the form of cognitive styles or methods of approach.

- Information about students' success or failure concerning the task at hand is given by cognitive feedback. Hence, reinforcement comes through giving information-a knowledge of results – rather than a reward.

It is worth mentioning that though, once, mentalist theories were included in the cognitive theories, today, a clear distinction is made. Behaviorist theories of learning view external factors as of central importance. Mentalist theories emphasize the role played by the learner's internal factors, crediting earners with a language acquisition device that enables them to work on what they hear and to extract the abstract rules that account for how the language is organized.

Cognitive theories of language acquisition tend to be interactional in the sense that they emphasize the joint contribution of external and internal factors.

Learning and the Humanistic View

The basic concern of this view is for human growth. It attacked fiercely any theory which treated people as objects and rationalism. It reaffirmed the affective and subjective world. Motivation, personal freedom and feelings were given the place they deserve. Maslow's hierarchy of motivation is a good example to illustrate this view. According to him, this hierarchy consists of five levels, at the lowest level come physiological needs; at the highest, self actualization. It becomes possible to move on to the next level only when the lower needs are satisfactorily met. These levels might be summarized as follows:

- Level one : Physiological needs such as hunger, thirst, sex and sleep must be met before L2 (a foreign language) comes into play.
- Level two : Safety needs: people will tend to organize their own worlds where safety and security is provided if these are not satisfied right at the beginning. If satisfied, their concern will be level

- Level three : Love and belonginess needs: these are of crucial importance since thanks to them, people seek and build friendly relationships.
- Level four : Self esteem needs: theses needs involve on one side, the desire for competence, strength and achievement and on the other side, confidence, independence and reputation.
- Level five : Self-actualization: It is the highest level where talents, capacities and potentialities are fully used and expressed. Learning can, thus, be considered as a form of selfactualization. Maslow's hierarchy of motivation is often displayed in the form of a pyramid (University of Tasmania, Australia. 22-Aug-2007):

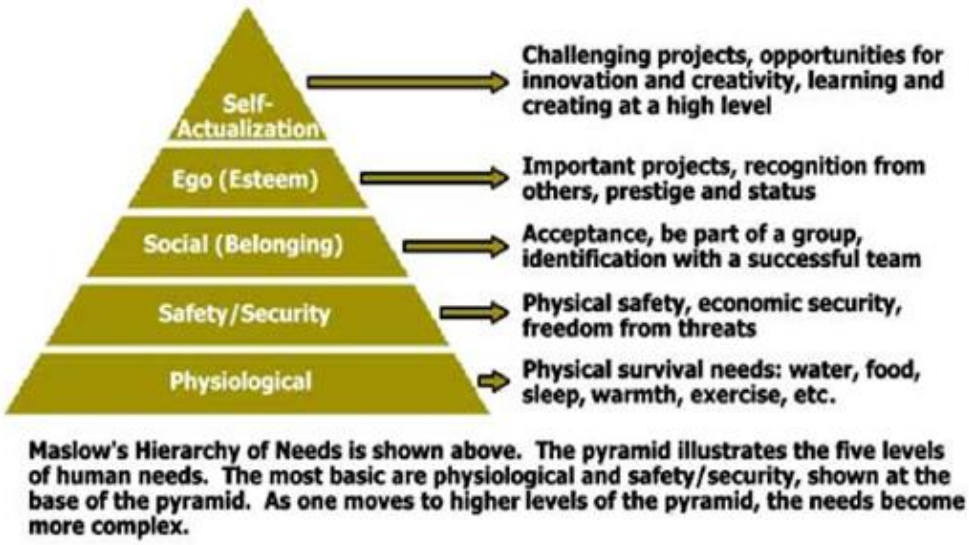


Figure 8. *Maslow's hierarchy of motivation ;* Source *(University of Tasmania, Australia. 22-Aug-2007)*

Note: we would add to the first level "religion". This factor has accompanied humans since the stone-age. Every creature is bound to get involved in it, consciously or unconsciously since "our brains are born religious". The originator of this idea is Carl Jung (1999). He was convinced him that "life has a spiritual purpose beyond material goals. Humans' main task is to discover and fulfill our deep innate potential, much as the acorn

contains the potential to become the oak, or the caterpillar to become the butterfly". Jung thought "spiritual experience was essential to our well-being".

Furthermore, the Humanistic view claims that any teacher's aim should be targeted towards the optimum growth of each learner. In our case, the teacher should help the pupils to help themselves, teach how to confront the unexpected. He should remember that his very young pupils look forward to a future that 'we shall not share'.To summarize this view, I found it very worth citing the following magnificent summary by Edna Mellor (quoted in Lorna Ridgeway 1969: 14):

> My philosophy of education is concerned with the whole child-his physical, mental and spiritual growth; his feelings, attitudes and relationships; his character and personality. I am concerned with him as an individual having certain innate tendencies, potentialities and traits, and also with him as a member of society having certain rights and privileges, duties and responsibilities.

Learning and the Social /Situational View

Such view posits that people learn from observing other people. These observations take place in a social setting. The role of observation is to allow people to see the consequences of other's behaviors and gain some idea about what might happen from acting in this or that way. Hence, the key aspects of observational learning involve attending to a behavior, remembering it as possible model and playing out how it may work in different situations. Lave and Wenger (1991) have put a radical model, situated learning, where rather than considering learning as the acquisition of knowledge, they have tried to orient it towards social relationships-situations of co-participation. In other words, instead of asking what kind of cognitive processes and conceptual structures are

involved, they ask what kind of social engagements provide the proper context for learning to take place. Thus, learning should involve full participation in the sociocultural practices of a community.

To sum up, this view focuses on the need to understand learning in context. It claims that situated learning depends on two major points:

- Talking of knowledge that is abstract or decontextualized is nonsense.
- Communities of practice are the place where new knowledge and learning are located.

To get a more concise idea of these four views, Merriam and Caffarella (1991) suggested the following scheme:

Aspect	Behaviourist	Cognitivist	Humanist	Social and situational
Learning theorists	Thorndick, Pavlov, Watson, Guthrie, Hull, Tolman, Skinner	Koffka, Kohler, Lewin, Piaget, Ausuble, Bruner, Gagne	Maslow, Rogers	Bandura, Lave and Wenger, Salomon
View of the learning process	Change in the behaviour	Internal mental process (including insight, information processing, memory, perception)	A personal act of fulfill potential	Interaction/ observation in social contexts. Movement from the periphery to the center of a community of practice
Purpose in education	Produce behavioural change in desired direction	Devlop capacity and skills to learn better	Become self-actualized, autonomous	Full participation in communities of practice and utilization of resources
Educator's role	Arranges environment to elicit desired response	Structures content of learning activity	Facilitates development of the whole person	Works to establish communities of practice in which conversation and participation can occur.

Table 2. *Scheme of Learning.* Source *:Merriam and Caffarella (1991)*

Learning and Constructivism

This theory encompasses a number of cognitive and other theories. It asserts that learning is the construction of new ideas or concepts based upon the learners' current and past knowledge. In other words, emphasis is put on the role of the learner in constructing his own view of reality.

As far as teaching is concerned, the teacher's role is to help the learner select and transform information, construct hypothesis and make decisions. A cognitive structure - schema - is to be relied upon. The learner should go beyond the information given and tries to discover principles by himself. In this context, a spiral organization of a syllabus is necessary to enable the learner to continually build upon what he has already learned. The key principles of constructivism are:

1-Experiences and contexts must be the main concern of instruction to allow for student's readiness, willingness and ability to learn and discover.

2-A spiral organization of instruction is necessary so that it can be grasped easily by the learner.

3-To go beyond the information given, instruction should be designed in a way to facilitate extrapolation and fill in the gaps.

It is worth mentioning that within constructivism there are two schools of thought:

- Social constructivism: it is based on Lev Vygotsky's theories and emphasizes both social and cultural learning contexts. According to Vygotsky, learning is a social and cooperative activity where the teacher acts as facilitator and the student is responsible for constructing his own understanding in his own mind. This theory places the teacher in an active role with the students developing their mental abilities through a discovery process.

- Cognitive constructivism: this theory involves a holistic approach. It emphasizes

  research and spontaneity. It fosters classrooms with authentic opportunities that challenge students. Today, Constructivist teaching is gaining much efficiency thanks to the recent research about the brain and how learning occurs. Caine and Caine (1991), quoted in an article by North Central Regional Educational Laboratory, suggested that braincompatible teaching is based on 12 principles:

1. "The brain is a parallel processor" (p. 80). It simultaneously processes many different types of information, including thoughts, emotions, and cultural knowledge. Effective teaching employs a variety of learning strategies.

2. "Learning engages the entire physiology" (p. 80). Teachers can't address just the intellect.

3. "The search for meaning is innate" (p. 81). Effective teaching recognizes that meaning is personal and unique, and that students' understandings are based on their own unique experiences.

4. "The search for meaning occurs through 'patterning' " (p. 81). Effective teaching connects isolated ideas and information with global concepts and themes.

5. "Emotions are critical to patterning" (p. 82). Learning is influenced by emotions, feelings, and attitudes.

6. "The brain processes parts and wholes simultaneously" (p. 83). People have difficulty learning when either parts or wholes are overlooked.

7. "Learning involves both focused attention and peripheral perception" (p. 83). Learning is influenced by the environment, culture, and climate.

8. "Learning always involves conscious and unconscious processes" (p. 84). . Students need time to process 'how' as well as 'what' they have learned.

9. "We have at least two different types of memory: a spatial memory system and a set of systems for rote learning" (p. 85). Teaching that heavily emphasizes rote learning does not promote spatial, experienced learning and can inhibit understanding.

10. "We understand and remember best when facts and skills are embedded in natural, spatial memory" (p. 86). Experiential learning is most effective.

11. "Learning is enhanced by challenge and inhibited by threat" (p. 86). The classroom climate should be challenging but not threatening to students.

12. "Each brain is unique" (p. 87). Teaching must be multifaceted to allow students to express preferences.

Furthermore, Caine and Caine (1991) believed that "optimizing the human brain means using the brain's infinite capacity to make connections, and understanding what conditions maximize this process." In order for complex learning to occur, three conditions should be omnipresent:

1- Relaxed alertness : This element is an optimal state of mind which consists of high challenge and low threat.

9- Orchestrated immersion : This element insists on the immersion of the learner in multiple, complex, and authentic experiences.

10- Active processing Processing here concerns experience as the basis for making meaning.

Overview on Assessment in EFL Learning

The main idea when using Assessment is to discover something about the person being tested, and assessment in education is generally used to provide feedback to teachers and pupils about progress in order to support future learning or to provide information about the level of pupil's achievements at points during and at the end of the school.

Assessment for learning (AFL) was a term made popular in the UK by Black and William (1998a, 1998b) when location teacher and student feedback as part of the assessment and learning process. The summary below should make sense of some key points in assessment (D. Lambert & D. Lines, 2000 : 4)

Assessment is : " the process of gathering, interpreting, recording and using information about pupils' responses to educational tasks"

Assessment involves :

- more formal contexts and procedures including written, timed tests marked under strict conditons ; and
- less formal settings including reading pupil's work and listening to what they have to say.

' Thus assessment encompasses responces to regular work as well as to specially devised tasks'.

Assessment requires :

- teachers to make judgements about pupils' responses measured against some standard of expectation. This is either (or a combination of) :

✓ norm referenced (set by the average performance of the group) or

✓ criterion referenced (set by predetermined and explicit knowledge, understanding or skills).

The purposes of assessment are :

- to provide feedback to teachers and pupils about progress in order to support future learning : *the formative role ;*
- to provide information about the level of pupils' achievements at points during and at the end of shool : *the summative role ;*

- to provide the means for selecting by qualification : *the certification role ;*
- to contribute to the information on which judgements are made concerning the effectiveness or quality of individuals and institutions in the system as a whole : *the evaluation role.*

Definitions of Assessment

When members of teaching learning group think of assessment, they might remember the pressure of final exams. But the fact is that, as Brown (2004) stated, testing and assessment are different.

- Bachman (2004) defined assessment as "a process of collecting information about something that we are interested in, according to procedures that are systematic and substantially grounded" (p.6-7).
- Ari Huhta (as cited in Spolsky & Hult, 2008) referred to assessment as "all kinds of procedures used to assess individuals (e.g. informal observations, self-assessments, quizzes, interviews, tests)" (p. 469).
- "Assessment for learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide here the learners are in their learning, where they need to go and how best to get there"(Assessment Reform Group, 2002:1)

In considering the specific qualities that determine the overall usefulness of a given assessment Bachman and Palmer (1996) describe them as following :

Usefulness = Reliability + Construct validity + Authenticity + Interactiveness + Impact + Practicality

Figure 9. *Usefulness.* Source : *(Bachman and Palmer, 1996 : 18)*

Among the specific qualities which are most commen, there are :

- **Validity**

This concept refers to whether a test measures what it is supposed to measure. There are several sorts of validity. These include:

1) Content validity: Does the test cover all aspects of what it claims to measure?
2) Face validity: Do the test items look like realistic, authentic uses of what is being measured?
3) Construct validity: Do all the items seem to be measuring the same thing?
4) Concurrent validity: Do students score on other measures of a construct such as listening or reading comprehension the same way they do on the test a teacher is using?

- **Reliability**

This concept deals with the trustworthiness of the test results. Types of reliability are:

1) Test/retest reliability: If students took the same test twice during a short time-frame with no instruction or feedback between testing, would they score the same way?
2) Internal consistency : It is a measure of consistency where a test is split in two and the scores for each half of the test are compared with one another. If the test is consistent it leads the user to believe that the items are most likely measuring the same thing.
3) Inter-rater reliability : This concept asserts that two raters evaluating language use should agree with each other. In the Algerian context, especially in large scale examinations such as 'BEM and BAC', inter-rater reliability is ensured by having the exam paper of a candidate corrected by three different teachers.

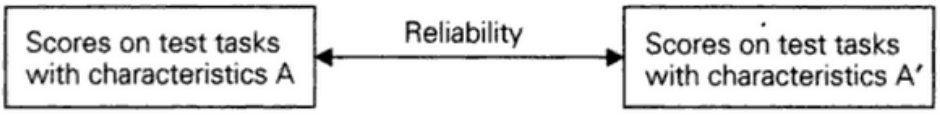


Figure 10. *Reliability*. Source *: (Bachman and Palmer, 1996 : 20)*

- **Washback**

This concept means the effect of testing on teaching and learning. Negative effects include teaching only to the test and memorizing possible test questions. Positive effects, if the test is valid, include focusing teaching upon what is important.

- **Practicality**

It is a matter of the extent to which the demands of the particular test can be met within the limits of existing resources including time, staff and test administration. We would add under this concept, the climate atmosphere which we believe influences so much the performance of a candidate: How would we expect from a student living in the Sahara to do well in an exam when scheduled by the end of June? (e.g., the case of BEM or Baccalauréat in Algeria).

Purposes of Assessment

Thinking of assessment purposes constitutes two basic questions: Why do teachers assess? For what purpose do they assess? Assessment is generally divided into three different purposes: (P. Weeden et al, 2002 :20)

• Diagnostic	Indicates how current performance differs from expected performance. Can be used to identify specific problems that a pupil may be experiencing.
• Formative	An assessment that helps pupils learn ; results in actions that are successful in closing the gap between current and expected performance
• Summative	An assessment that is used to certify or record end of course performance or predict potential future attainment ; the final product of a unit or course ; an examination grade.

Table 3. *Some Definitions of Assessment Terminology.* Source *(P. Weeden et al, 2002 :20)*

- **Formative assessment**

As Lewy (1990) confirmed, formative assessment does not have a precise definition. It takes place during learning and is aimed to help learning and teaching by giving appropriate feedback (Lewy, 1990). The use of formative assessment is to both select or modify learning procedures and to choose the best remedies for improving weak points in learning and teaching (Nitko, 1993). Most of classroom assessment is formative and students *form* their knowledge by analyzing and internalizing teachers' comments (Brown, 2004)

- **Summative assessment**

As its name suggests, summarizes what the students learnt during a course and it is usually done at the end of the semester (Brown, 2004). This kind of assessment shows what objectives have been accomplished, but it lacks feedback or any suggestion to improve performance. Alderson (2005) associated summative assessment with long traditional tests which were so stressful to students. Any kinds of test which lacks further feedback and the only possible use of it is gathering scores in the eyes of students can be summative even if teachers have primarily designed the test to facilitate learning and teaching.

- **Diagnostic assessment**

Teachers often have recourse to such type of assessment to diagnose and identify areas of strength and weakness that students exhibit so that appropriate assistance may be given to such students.

The following table will help in distinguishing between the three main purposes of assessment :

Formative	Diagnostic	Summative
Evaluation of an individual learner used to help individual improve performance; – Identification of areas for improvement – Specific suggestions for improvement.	A distinct form of measurement. Its purpose is to ascertain, prior to instruction, each student's strengths, weaknesses, knowledge, and skills. Establishing these permits the instructor to remediate students and adjust the curriculum to meet each learner's unique needs.	Evaluation of an individual learner used for judgments or decisions about the individual – Verification of achievement for individual – Motivation of individual to maintain or improve performance – Certification of performance – Grades – Promotion

Table 4. *Assessment Purposes : Levels and Uses*. Source *(Nuhad Y Dumit, 2012 :5)*

Conclusion

Many researchers have discussed the scientific work of mind and brain, also they have talked about the thinking and learning process they tried to define learning as a concept. In addition to that a whole range of theories has influenced the way a foreign language is learned. In the early part of the twentieth century, researchers have done experiments to know what affects one's behavior, that's what led to the appearance of the theory of behaviorism. It came from Noam Chomsky in 1959. After this it was the arising of the question: "if all

language is learnt behavior, how come children and adults frequently say things they have never heard before?" Through a question another theory has been appeared, in addition to others (Cognitivism, Humanistic, and Constructivism…). After teaching the learner and after providing him with information in various fields we need to know what he is able to do with this knowledge. At this stage comes Assessment which is considered as a systematic process to identify strengths and weaknesses in student performance, and to improve the quality of teaching and learning. When we assess the learner, we assess him on information which is in his mind, information that he remember.

All what have been discussed in the previous chapters will be proved in the field work.

Chapter III. Field Work

Introduction

This study is undertaken in order to determine the intellectual abilities and the school achievement of middle school pupils in Biskra , Algeria. Hopefully, during the course of this study, some of our long held beliefs would be answered; and these beliefs are cast in the form of predictions which may be proved or disproved in the course of this research.

The prediction made is that middle school pupils, aged (11-12) years that would score higher in the administrated memory test would score higher in EFL learning. In other words, I predict that pupils with good memorizing aptitude are more capable than others to learn foreign language , and are the best who achieve good scores in English. In this study, gender differences have not been given any predictions as far as memory and school achieving are concerned.

In this chapter, we aim at collecting enough data about the learners' memorizing abilities as to identify the possible link between their memory and their school achievement using two tools : an interview and a test.

Interview

Purpose of Interviewing in this Study

Interviewing as a qualitative method in this study is a method which proved useful for many reasons: It allows a direct access to what the person is thinking about. This interview concernes the essential component of comprehensive psychoeducational assessment. Information gathered from the interview can be used to generate and guide testing procedure. Information obtained from the interviewing should never be used alone to comfirm our hypothesis.

Type of Interview, Interview Schedule, Question Format, and Response Mode

Interview questions which has been proposed by Milton J. Dehn (2008 ; 147) (appendix A), includes 10 questions categorized into two types of schedule items which were used: fixed and open-ended questions. Fixed alternative items aimed at gathering factual information as *Does the student have difficulties in memorizing information ?* Open ended questions sought for opinion and attitudes, for example, *What memory strategies, if any, have you observed the student using ?* It is important to note that the interview schedule could not be strictly followed, and the ordering of questions was often altered. In answering one question, respondents often anticipate on other questions. Sometimes, new questions emerge, while others are necessarily deleted.

Summary of Interview Questions

The questions are organized in an orderly sequence, beginning with a general question about the problem faced and ending with a question on signs which could be observed concerning difficulties in memorizing, bearing in mind that all these variables revolve around the memory issue. The questions are concerned with the following variables:

- Teaching learning strategies
- Four skills
- Memory strategies

Conditions for Interviewing

In this section we shall provide descriptions of the setting, the time spent :

- **The setting**: The interviews took place in Ben Amara Abd Elhafid Middle School. This was mainly determined by the participants' choice. Teachers, most of the time, welcomed the researcher in their working place, in the staff room.
- **The time :** The interview was conducted with teachers on Wednesday the 10th of May (2017) in the staffroom from 10h00 to 11h00.
- **The participants :** the researcher has conducted the interview with (5) teachers of English, (4) of them were from the same school Ben Amara Abd Elhafid Middle School, and the other one was from Noreddine Abd Elkader middle school.All of them are either teaching or have taught MS1 for at least (6) years.

Data Analysis Procedure

After gathering all the data, we followed the steps described by Seliger and Shohamy (1989:204-205) which consist of:

1. **Data transcription:** The interviews were tape recorded and transcribed indicating exactly word to word what was said. Transcripts were marked with date and place (Appendix A).
2. **Organizing scheme:** After reading and re-reading the transcripts, Segments of texts that answer our research questions were delineated, and sets of categories were derived from these segments. Common and different patterns, emerging from the data, were grouped into an organizing scheme.
3. **Data summarizing:** The data were summarized and selected quotes were highlighted where appropriate in the data analysis (Appendix A)

Interview Data Categories

The data obtained from the interview were analyzed using both qualitative and quantitative approaches. Answers for each question were tabulated. For the first eighth questions teachers have agree on the same answers. In numbers this means that the answers of those questions took (100%) as percentage, for the two remainings questions (9- 10) are presented in the scheme (see Figure 11) under the table which shows the results of the interview.

	Questions	**Categories** *Responses to the question*	**Percentage**
1	Does the student have difficulties in memorizing information ?	• Yes.	100%
2	How much repitition does the student require before learning new information ?	• Twice or three times.	100%
3	How often does the student ask you to repeat directions ?	• Depending on his level.	100%
4	Does the student have any difficulties with listening comprehension ?	• Yes.	100%
5	How well does the student stay focused on the task at hand ?	• Slowly	100%
6	How well can the student do two things simultaneously, such as listen and take notes ?	• Easily.	100%
7	Does the student have difficulty expressing ideas orally or in writing ?	• Both of them, especially writing.	100%
8	Does the student seem to be stronger either visual or auditory learning ?	• Generally they are visual learners.	100%
9	What memory strategies, if any, have you observed the student using ?	• Repitition • Role playing	60% 40%
10	What signs have you observed that indicate the student might have problems with short-term memory ?	• Remembering • Misunderstanding • Difficulties in writing	60% 20% 20%

Table 5 *Interview data categories*

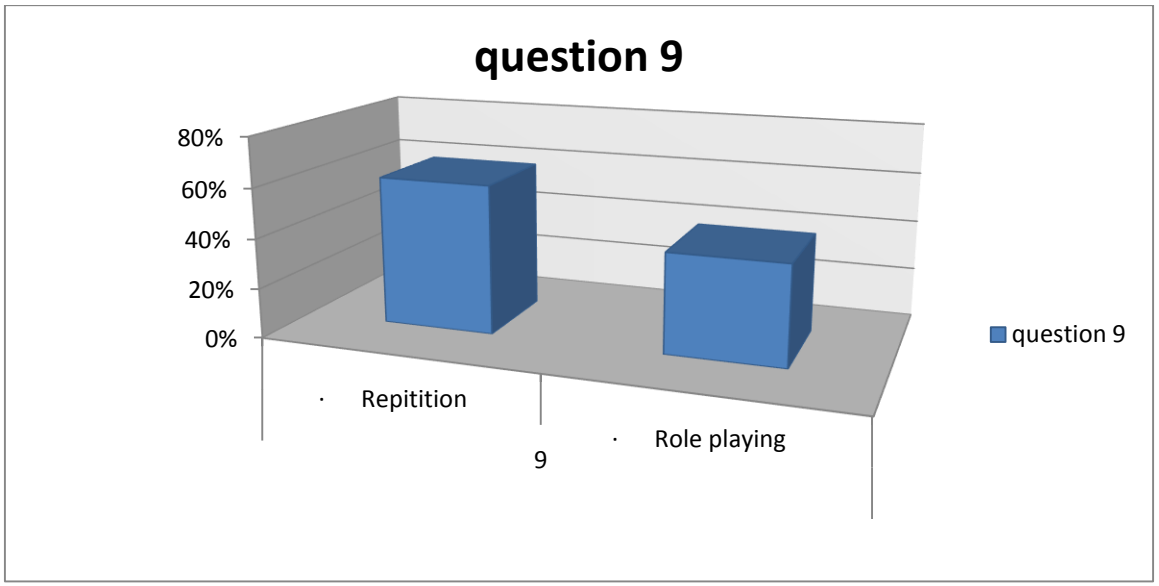


Figure 11. *Question 9 answering percentage*

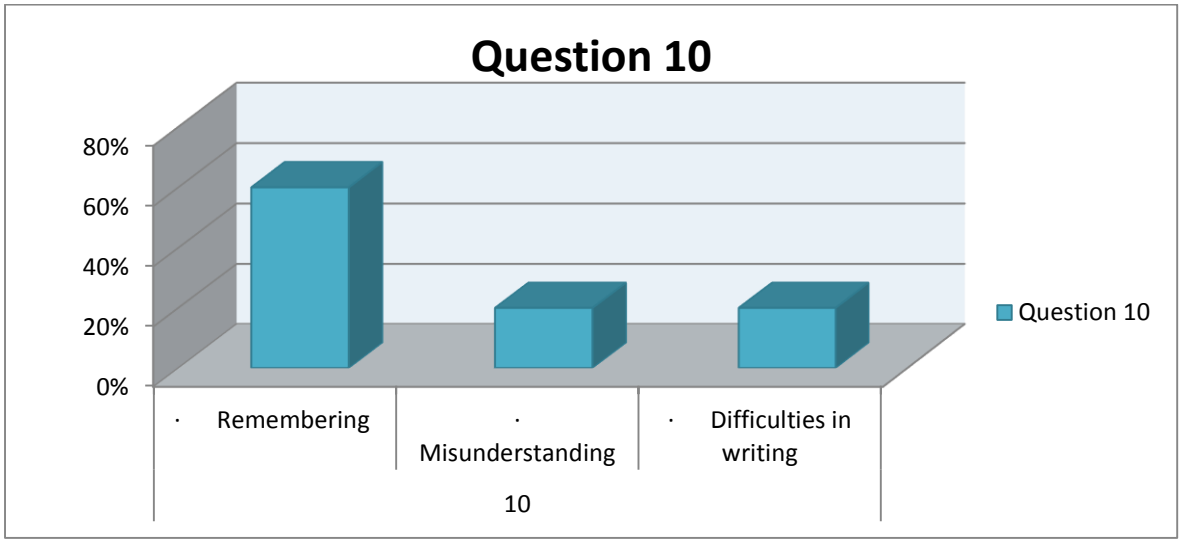


Figure 12. *Question 10 answering percentage*

Limitations of the Interview Sample

The research sample is certainly not characteristic of all Algerian teachers of English, and it is certainly not at all the middle schools. However, we can claim that the results can be generalized to all students. Our sample represents largely the targeted population and could be regarded as a representative sample. Due to the limited number of our participants in this study, our observations should be regarded as case studies of particular science writers. However, common ideas did emerge, allowing us to speak of a general pattern.

Test

Description of the Test

The given test in our study was produced by IQ Test Labs © 2014. This website has put some free PhD certified IQ tests to discover the intellectual strengths. The test (Appendix B) is ideal for measuring differences in abilities for tasks that are analytical in nature. Since the participants of our study are (11-12) years old children we have chosen the test which is in a form of games. In our test there are (12) questions each one with four (04) options : A, B, C, and D. in order to facilitate the answering process the researcher has designed an answer sheet (see Appendix B.1). The purpose of this test is that it includes the main variables which the learner deals with when studying English, and which help in measuring the memorizing capacity. The variables are the following:

- Shapes
- Numbers
- Letters
- Colors
- Story
- Pictures
- Address
- Words
- Set of directions

The learners did not know that their productions were going to be used in a research. This was done on purpose, so that the spontaneity of their use is not altered ; that is why the test was during the normal sessions on Wednesday the 10th May

2017 from (8) o'clock to (9) o'clock with (20) participants, (10) learners are excellent, and the remainings (10 learners) are weak ones with low marks.

Analysis of the Results

In this test we have given (01) point for each question.

→ **Question 1 :** A set of shapes was presented to the learners, and they were asked to memorize it for (10s), then they were asked to choose the correct one among four options.

- (2) pupils found the correct set (10%)
- (18) pupils failed finding the correct one (90%)

→ **Question 2 :** A set of numbers was presented to the learners, and they were asked to memorize it for (10s), then they were asked to choose the correct one among four options.

- (16) pupils found the correct set (80%)
- (4) pupils failed finding the correct one (20%)

→ **Question 3 :** A set of letters was presented to the learners, and they were asked to memorize it for (10s), then they were asked to choose which letter wasn't among the four options.

- (10) pupils found the correct set (50%)
- (10) pupils failed finding the correct one (50%)

→ **Question 4 :** A set of colors was presented to the learners, and they were asked to memorize it for (10s), then to choose the color which was to the right of blue. Four options were given to the learners to choose one of them.

- (16) pupils found the correct set (80%)
- (4) pupils failed finding the correct one (20%)

→ **Question 5 :** A set of colors was presented to the learners, and they were asked to memorize it for (10s), then to choose the color which was colored blue. Four options were given to the learners to choose one of them.

- (12) pupils found the correct set (60%)
- (8) pupils failed finding the correct one (40%)

→ **Question 6 :** A picture was presented to the learners, and they were asked to memorize it for (10s), then to choose the color of the building's windows on the right. Four options were given to the learners to choose one of them.

- (6) pupils found the correct set (30%)
- (12) pupils failed finding the correct one (70%)

→ **Question 7 :** A short story was presented to the learners, and they were asked to memorize it for (10s), then to answer the question : *what did the fairy give to the woman ?* Four options were given to the learners to choose one of them.

- (6) pupils found the correct set (30%)
- (14) pupils failed finding the correct one (70%)

→ **Question 8 :** A set of pictures was presented to the learners, and they were asked to memorize it for (10s), then to choose which picture was not in the set. Four options were given to the learners to choose one of them.

- (18) pupils found the correct set (90%)
- (2) pupils failed finding the correct one (10%)

→ **Question 9 :** An adress was presented to the learners, and they were asked to memorize it for (10s), then to choose the suit number among the four options which were given to the learners.

- (14) pupils found the correct set (70%)

- (6) pupils failed finding the correct one (30%)

→ **Question 10 :** A set of shapes was presented to the learners, and they were asked to memorize it for (10s), then to choose which shape was not in the set. Four options were given to the learners to choose one of them.

- (16) pupils found the correct set (80%)
- (4) pupils failed finding the correct one (20%)

→ **Question 11 :** A set of words was presented to the learners, and they were asked to memorize it for (10s), then to choose which word was not in the set. Four options were given to the learners to choose one of them.

- (16) pupils found the correct set (80%)
- (4) pupils failed finding the correct one (20%)

→ **Question 12 :** A set of directions was presented to the learners, and they were asked to memorize it for (10s), then to answer the question *where should you exit the station ?* Four options were given to the learners to choose one of them.

- (2) pupils found the correct set (10%)
- (18) pupils failed finding the correct one (90%)

The table below shows the results of the test :

Question's Number	Correct answer	Incorrect answer
1	00%	100%
2	60%	40%
3	50%	50%
4	80%	20%
5	70%	30%
6	20%	80%
7	30%	70%
8	90%	10%
9	70%	30%
10	70%	30%
11	70%	30%
12	10%	90%

Table 6 *Test Results*

The questions' number of the test and the results are put in the below Columns scheme.

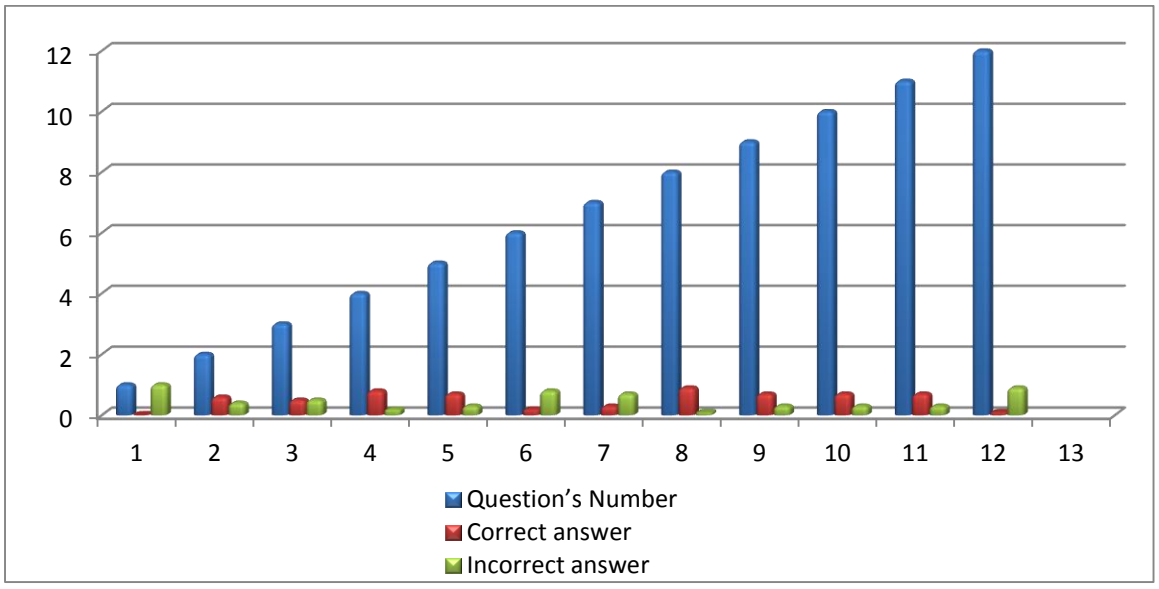


Figure 13. *Columns scheme for correct answers versus incorrect answers*

Discussion of the Results

According to the table, we find that pupils have achieved high percentage (80%-90%) in question : (2- 4- 8- 10 and 11). The variables which were used in these memory tasks were previously known, such as : numbers, colors, set of shapes, and set of words. That is why, most of them had enough time to concentrate on the task and to recall the variable of each question. In addition to the table, we find that pupils have achieved low percentage (00%-30%) in question : (1- 6- 7 and 12). The variables which were used in these tasks are directions and short story, both of them includes new vocabularies that did not exist before in the environment of the learners or they did not study them yet. That is to say, the two factors that lead to these results could be the newness of the task itself on the one hand, and the lack of interest on the other hand.

Some learners who failed in giving the correct answer say that the time was not enough to do the task and others say that the instructions were not clear. This goes with what the teachers have mentioned before that the learners do have difficulties in memorizing information on one hand and on the other hand clear instructions with comprehensible vocabularies allow the learners to do the task easily.

Comparing the Results of the Two Tools with the Learning Achievements

The aim of our study is to find out whether a learner with good memorizing aptitude perform well in EFL learning. When categorizing the participants of the test, we find two groups : learners with high level (10 pupils) and learners with low level (10 pupils). The following tables show the exam marks and the percentage of the answers for each category.

Learners with high level		Learners with low level	
Symbol of pupils	**Exam marks**	**Symbol of pupils**	**Exam marks**
A	18.00	1	08.80
B	19.03	2	06.43
C	18.06	3	08.76
D	15.70	4	06.86
E	15.33	5	07.60
F	15.40	6	06.16
G	15.63	7	09.00
H	15.36	8	08.26
I	17.36	9	07.63
J	15.00	10	08.96
K	17.26	11	09.13
L	18.53	12	08.46
M	15.06	13	09.80
N	16.10	14	07.00
O	16.20	15	07.16
P	16.00	16	09.16
Q	16.50	17	08.13
R	16.73	18	05.10
S	15.26	19	06.56
T	16.93	20	09.06

Table 7. *Exam marks*

Question's Number	Learners with high level	Learners with low level
1	00%	00%
2	100%	60%
3	80%	40%
4	80%	80%
5	80%	60%
6	40%	00%
7	60%	100%
8	80%	100%
9	60%	80%
10	80%	60%
11	80%	60%
12	60%	60%

Table 8. *Learners' answering percentage*

The questions' number of the test and the results are put in the Columns scheme below.

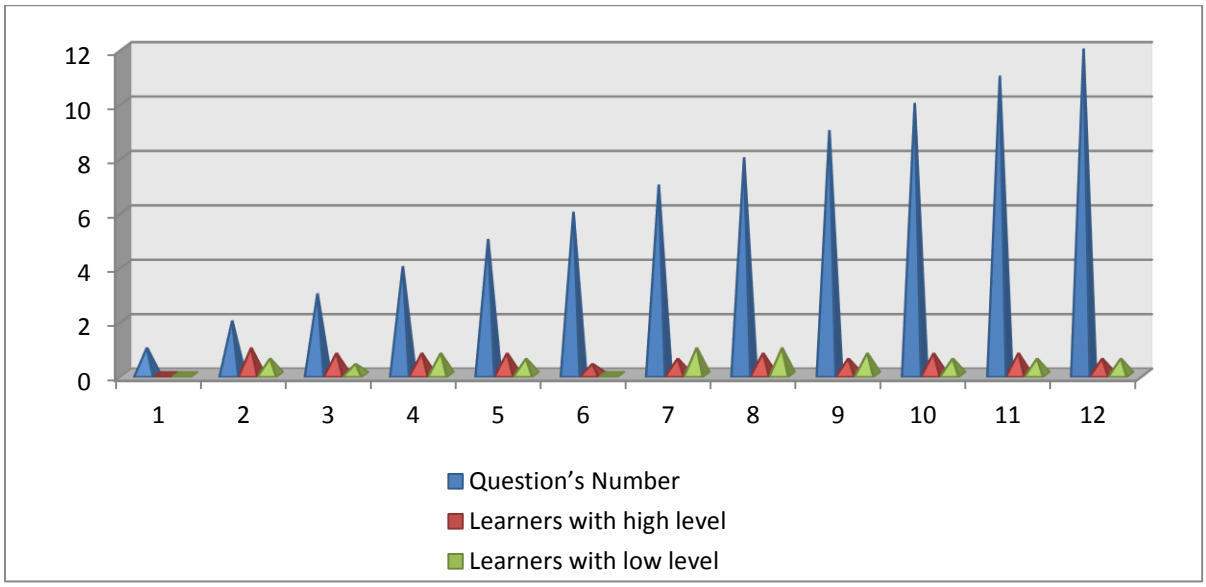


Figure 14. *Learners' answering percentage*

Discussing the Results

From the table, we find that for question: (1, 4, and 12) both categories had the same percentage, but for the other questions we find that learners with high level achieved the higher percentage in (6) questions. Questions deal with variables which come in sets and groups such as: set of numbers, set of shapes, set of letters, and set of words, in other words task that needs to depend on memory more than others, whereas the learners with low level

scored higher percentage in only (3) questions which deal with: short story or and address those variables include new vocabularies that's why learners with high level tried to use understanding as a memorization strategy by they failed, in the other hand learners used association instead of understanding that's why (10) s were enough to remember and to achieve high percentage.

Conclusion

In general there is a strong correlation between the scores obtained from the test and the interview. High scores in exams seem to predict some high scores in memory tasks. However, it is not because a pupil gets higher memory score than another that we have to expect that the first one will have also higher marks in exams, (see for example, question 7, 8, and 9).But the general tendency is that there are strong correlations between global memory scores and global exam marks. In fact, memory abilities help in EFL learning achievements, but there is rarely a linear relationship between the two variables: memory and EFL learning achievements.

Suggestions for Pedagogical Implications

After examining the results obtained in the experimental study designed in our research, and which put focus on the importance and the role of memory in thinking on our ability to achieve high level in learning English as a foreign language, we can propose the following general suggestions:

Children, especially those who have difficulties in remembering the material studied at school, should be given the opportunity to rehearse it in the classroom through activities proposed by the teacher in a certain manner that they entail a kind of intelligent repetition to store better even the details. In other terms, teachers should rely on elaborative and deep rehearsal.

Since in many cases, different problems are concerned with the organisation of our knowledge in memory structure, teachers have to help the children to learn how to organise and structure the information they are faced with. They have to understand how they can structure their knowledge.

When a new concept is studied, teachers may try to present it to the children by different ways, first a theoretical work followed by practical experiments. Then**,** they can ask the pupils to make some research on the subject and present a personal work in the classroom. This will improve and complete the definition of the concept and strengthen the different levels of their memory.

The children have to enhance their vocabulary to reinforce their knowledge; this will help them to understand the texts and the terms used in the problems presentation. Teachers can give them as much as possible printed texts or stories, they have to read them and give their own interpretation of what they have read. It will make them explore back their long-term memory to remember the story its vocabularies.

The syllabus has to be renewed and should contain topics that motivate pupils.

The syllabus should be highlightened ; given more time and less material, pupils would be able to make a better use of selective attention.

We hope that our suggestions could be a helpful hand for the pupils. Of course, teachers should adjust them to the learners and the learning situations.

General Conclusion

This study has been devoted to the investigation of cognitive development in Algerian children of eleven and twelve years old. We have namely focused our analysis on their memorization capacities. The question that has been clearly asked here was: Can we consider a middle school pupil with good memorizing aptitude as a good learner?

To analyze the possible links between memory and learning achievement, we have first presented the theoretical foundations and results on memorizing aptitude and learning depending on studies that have been reported in the literature with some of the new findings on the links between these capacities. As we have mentioned previously, we are not interested in the measurement of the memory capacities of our children, but we have tried to find out if there exists a given relation between their capacity for memorization and their abilities to achieve good level in EFL learning.

For this purpose, we worked on the findings of : The interview with middle school teachers of English. The questions of this tool was based on some main variables : teaching learning strategies, four skills, and memory strategies. In addition to test on memory on two groups of ten pupils for each. Participants of an Algerian middle school. The two sub-groups of the same instructional level and of an equal size are constituted of boys and girls.

From the analysis of multiple correlation results between the memory and learning achievement, we have derived some conclusions and remarks, which are in accordance with what was expected by theoretical studies.

Actually, learning achievements seem to have a strong relation with memory performances if we consider that: pupils who have a good memory capacities, have achieved well in EFL learning.

To conclude, we can say that, in general, memory abilities help to enhance EFL learning, but there *is no established linear relationship between children memory and EFL learning achievements*.

This issue is still a wide open area for investigation. We tried to do our best with the present study to clarify as clear as possible the relationship between memory and EFL learning for children of average eleven years old. We hope that this small piece of research will be of some significance to investigation in the area. Our main concern was to bring some useful clarifications and we wish that the target objective has been reached.

Bibliography

Alamargot, D and Chanquoy, L. (2001). '*Through the Models of Writing*'. Retrieved From *https://books.google.dz*

Anderson, J. (1995). *Encoding and Storage,* in J. Anderson, *Cognitive Psychology and its Implications.* (Edition) NewYork: Freeman.

Andrew, R.A. et al. (2003). *Working Memory Capacity and Its Relation to General Intelligence*. Vol. 7, No 12, Trends in Cognitive Sciences

Atkinson, R.C., & Shiffrin, R.M. (1968). *Human Memory: A Proposed System and its Control Processes*. In K.W. Spence & J.T. Spence (Eds.), *The Psychology of Learning and Motivation: Advances in research and Theory*, New York: Academic Press. Vol. 2, pp 89-195.

Baddeley, A.D., & Hitch, G. (1974). Working Memory. In G. H. Bower (Ed.), *The Psychology of Learning and Motivation : Advances in Research and Theory*, New York, Academic Press, Vol. 8, pp 47-89.

Bader, A. (2007). *A Study of the Correlation Between Intelligence and Reading Comprehension the Case of Middle School 4th Year Learners*, Mentouri University, Constantine. Dissertation submitted for the Degree of Magister.

Basar . E. (2004). *Memory and Brain Dynamics Oscillatons Integrating Attention, Perception, Learning, and Memory.* Retrieved From *https://books.google.dz*

Caine, R.N., and Caine, G. (1990). *Understanding a Brain Based Approach to Learning and Teaching Educational Leadership*. ASCD

Cambridge Advanced Learner's Dictionary & Thesaurus © Cambridge University Press), http://dictionary.cambridge.org.

Dehn. J. M. (2008). *Working Memory and Academic Learning Assessment and Intervention.* Retrieved From *https://books.google.dz*

Fukuda, K. et al. (2010). *Quantity, not quality:The relationship between fluid intelligence and working memory capacity*, University of Oregon, Eugene, Oregon, Psychonomic Bulletin & Review 2010, 17 (5), 673-679.

Gardner, H. (1985).The Mind's New Science. *The History of the Cognitive Revolution*- New York: Basic Books.

Gardner. J. (2012). *Assessment and Learning*. Retrieved From *https://books.google.dz*

Isaacs. T. et al. (2013). *Key Concepts in Educational Assessment*. Retrieved From *https://books.google.dz*

Jordan, A et al. (2008). *Approaches to Learning a Guide for Teachers.* Retrieved From *https://books.google.dz*

Jordan. A. et al. (2008). *Approaches to Learning A Guide For Teachers*. Retrieved From *https://books.google.dz*

Killen. R. (2005). *Programming and Assessment for Quality Teaching and Learning.* Retrieved From *https://books.google.dz*

Leleur. S. (2012). *Complex Strategic Choices.* Retrieved From *https://books.google.dz*

Legg, S and Hutter, M. *(*2007*). A Collection of Definitions of Intelligence*, Technical Report IDSIA-07-07,arXiv :0706.3639v1, cs AI, 25 jun 2007.

Lambert. D & Lines. D. (2000). *Understanding Assessment Purposes, Percaptions, Practice*. Retrieved From *https://books.google.dz*

Neisser, U. et al. (1996) *Intelligence: Knowns and Unknowns*. American Psychological Association Inc., Vol. 51, No. 2, pp. 77-101.

Oxford Advanced Learner's Dictionary, https://en.oxforddictionaries.com.

Phye. D. G. *(*1997). *Handbook of Classroom Assessment Learning, Achievement, and Adjustment.* Retrieved From *https://books.google.dz*

Silbert,L.B. Ph.D. And Silbert,A.J, Ed.D, *Top 12 Memory Strategies For Better Grades*. Retrieved From TeachHUB, http://www.teachhub.com.

Turner, J. (1984). *Cognitive Development and Education* : London, Methuen.

Williamon, A. (2004). *Musical Excellence: Strategies and Techniques to Enhance Performance*. Retrieved From *https://books.google.dz*

Yates, D. (2001). *Memory Tips of Math "Memorization and Learning Style".* Retrieved From *https://books.google.dz*

APPENDIX A

Teachers' Interview

Interviewee. M.S

Participants: Teachers

Setting : Staffroom

1. **Does the student have difficulties in memorizing information ?**

   Teachers : *Yes*, s/he does. Depending on his/ her level.

2. **How much repitition does the student require before learning new information ?**

   Teachers : The students requires *twice or three times* of repition.

3. **How often does the student ask you to repeat directions ?**

   Teachers : The students ask for *once and sometimes twice*.

4. **Does the student have any difficulties with listening comprehension ?**

   Teachers : *Yes*, they does, specially since the language that they are listening to is a foreign one.

5. **How well does the student stay focused on the task at hand ?**

   Teachers : Generally *slowly*.

6. **How well can the student do two things simultaneously, such as listen and take notes ?**

   Teachers : S/he can do it *easily* if the instructions given to him/ her are clear.

7. **Does the student have difficulty in expressing ideas orally or in writing ?**

   Teachers : Yes, they have some difficulties in speaking and writing *specially writing*.

8. **Does the student seem to be stronger either visual or auditory learning ?**

   Teachers : Students seem to be strong *visual* learners more than auditory ones.

9. **What memory strategies, if any, have you observed the student using ?**

   Theachers ‘A, B, and C’ : I have observed that the student use *repitition*.

   Teachers ‘D, and E’ : Memory strategies that the student may use is the *role play*.

10. **What signs have you observed that indicate the student might have problems with short-term memory ?**

    Teachers ‘A, B, and D’ : The sign is *finding difficulties in remembering some information.*

    Teacher ‘C’ : What indicates that the student have problems is *difficulties in writing* (written expression).

    Teacher ‘E’ : *Misunderstanding* (while listening) is a sign.

APPENDIX B

THE RESEARCH INSTRUMENTS

The Role of Effective Memorizing Aptitude in Enhancing EFL Learning.

A Case Study of first Year (Noureddine Abd Elkader Middle school) Pupils

A Project Carried Out by Samah MOUADA

NOREDDINE ABD ELKADER MEDDLE SCHOOL

May 2017, Biskra,

Algeria

Dear pupils,

You are kindly invited to take part in a research on " The Role of Effective Memorizing Aptitude in Enhancing EFL Learning".

We reassure you about the confidentiality of your private information, the answers given, and the results obtained.

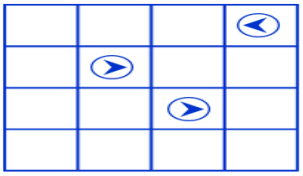
Your contribution through the test will be very much appreciated.

MEMORY TEST

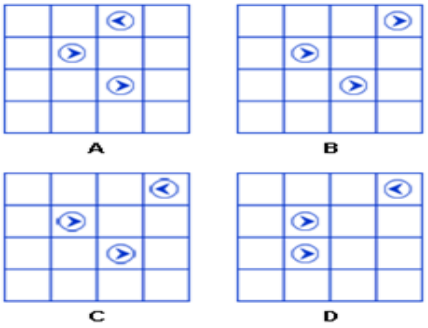
Instructions

You will be presented with a series of shapes, letters words and pictures. Each of these items will appear on your screen for (10) seconds. You will then be asked a question to test your memory on each item.

1) Get ready to memorize a set of shapes



- the correct set is :



2) Get ready to memorize a set of numbers

5	8	7
1	2	9
3	6	4

- The correct set is :

9	5	1
8	2	4
7	3	6

A

5	9	1
6	2	8
3	7	4

B

5	8	7
1	2	9
3	6	4

C

9	5	8
1	4	2
6	3	7

D

3) Get ready to memorize a set of letters

F	W	J	Q
X	A	D	K
T	B	I	L

- The letters which did not appear in the set are :

A. F

B. D

C. B

D. P

4) Get ready to memorize a set of colors

- The color which was to the right of blue is :

A. Green

B. Orange

C. Brown

D. Grey

5) Get ready to memorize a set of colors

- The color which was colored blue is :

A. Green

B. orange

C. Brown

D. Grey

6) Get ready to memorize a picture

- The windows of the building on the right are colored :

A. Green

B. Blue

C. Brown

D. Grey

7) Get ready to memorize a short story

Hans Christian Andersen
Thumbelina

There was once a woman who wished very much to have a little child, but she could not obtain her wish. At last she went to a fairy, and said, "I should so very much like to have a little child; can you tell me where I can find one?"

"Oh, that can be easily managed," said the fairy. "Here is a barleycorn of a different kind to those which grow in the farmer's fields, and which the chickens eat; put it into a flower-pot, and see what will happen."

- What did the fairy give to the woman?

A. Corn

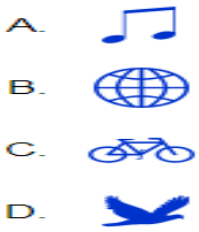
B. Peas

C. Barley

D. Barleycorn

8) Get ready to memorize a set of pictures

- Which of the following pictures was not in the set?



9) Get ready to memorize an address

Santa Monica Consulting Agency

94 Ocean Drive

15th Floor, Suite 1504

Long Beach 90620

- What was the suite number?

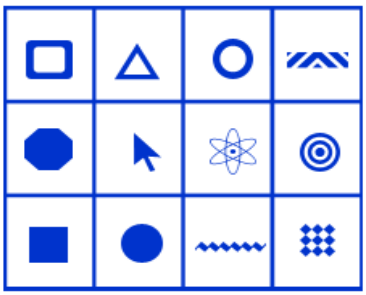
A. 1504

B. 1405

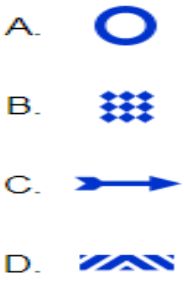
C.1804

D.1554

10) Get ready to memorize a set of shapes



- Which of the following shapes was not in the set?



11) Get ready to memorize a set of words

Table	Water	Lettuce
Car	Chair	Carrots
Lamp	Sofa	Apples

- Which of the following words was not in the list?

A. Lamp

B. Water

C.Furniture

D.Carrots

12) Get ready to memorize a set of directions

Via the Metro

From Buena Park station, take the Orange Line west.

Exit the metro at the Pasadena stop.

Exit the station onto Florence Street.

Turn right and walk 2 blocks to Wilshire Blvd.

Turn left and walk one block to 4100 Wilshire Blvd.

Take the elevator to the fifth floor.

- Where should you exit the station?

A. Florence Street

B.Pasadena Street

C.Wilshire Blvd

D.Buena Park

You have completed the test

THANK YOU

APPENDIX B.1

SHORT TERM MEMORY GAMES

MEMORY TEST

NAME ……	**MARK** / **12**

THE ANSWERS

1	2	3	4	5	6	7	8	9	10	11	12

THANK YOU

ملخص

تتناول هذه الأطروحة دراسة العلاقة بين الذاكرة (القدرة علي التذكر و تخزين المعلومات) و التحصيل الدراسي اثناء تعلم اللغة الانجليزية ، واهم التقنيات المساعدة على تنظيم المعلومات في الذاكرة لاستعمالها وقت الحاجة و على استرجاعها في أقصر وقت ممكن لضمان تعلم اللغة الانجليزية كلغة اجنبية ثانية. العينة المخصوصة بذلك تتمثل في تلاميذ المتوسطة الذين تتراوح أعمارهم بين 11و 12سنة. اعتمدت الدراسة على وسيلتين : تمرين تطبيقى (مجموعة تمارين حول الذاكرة) و حوار مع استاذة التعليم المتوسط للغة الانجليزية الذين اما ما زالوا يدرسون او سبق لهم تدريس السنة الاولى متوسط لسنين سمحت لهم بتكوين فكرة حول التلاميذ و اقبالهم على مادة الانجليزية كمادة اجنبية ثانية. نتائج البحث أكدت على وجود علاقة متينة بين التحصيل الدراسي لمادة اللغة الانجليزية و الذاكرة.

Résumé

Cette thèseprend en charge l'étude de la relation ecistant entre l'acquisition des savoirs scolaires durant l'apprentissage de lla langue anglaise et la mémoire (la capacité de commémoration et le stokage des renseignements), et les principales techniques qui surviennent à l'organisation des renseignements dans la mémoire pour l'utiliser en cas de besoin, ainsi lea commémorer dans les brefs délais, afin d'assurer l'apprentissage d'Anglais autant qu'une 2ème langue étrangère. L'échantillon, pris en question, concerne les apprenants du C.E.M dont leur age varie entre 11 et 12 ans. Deux moyens ont été fiscés par cette étude : exercise pratique (un ensemble d'exercices concernant la mémoire), et un débat avec les enseignants du cycle moyen chargés d'enseigner l'Anglais et qui exercent encore leur tache ou ceux qui déjà enseigné cette discipline aux apprenants de la 1ère année moyenne pour un bon moment, ce qui leur permet de bien élaborer une idée envers les apprenents et le taux d'envis qui favorise cette langue comme langue étrangère. Les resultants de cette recherche on confirmé l'existence d'une relation solide reliant reliant l'acquisition des savoires scolaires de cette matière (la langue anglaise et la mémoire).