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Faculty of Letters and Foreign Languages

Department of English

The Impact of Guessing and Self-Correcting Lexical Items on Increasing Memorization: Experimental Study on Third Year Middle School Pupils at Zeggout Ismail, Jijel

Dissertation Submitted in Partial Fulfillment of the Requirements for Master Degree in Language Science

Submitted by:	**Supervised by:**
Khedimallah Safa	Mr. Kerdoun Ahcène
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Mrs.M. Nouri	**Chairperson**	**University of JIjel**
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Dedication

In the name of Allah, the Most Gracious, the Most Merciful

I would like to dedicate this research paper lovingly:

* First and foremost to my respected parents who have been my constant sources of inspiration throughout my career. Simply, thank you is the least I can say in return to your endless love, your support, and your encouragement to chase my dreams.

* To my angels; my lovely sisters and my birds; my dearest brothers.

* Sincere thanks for my tender sister ``Fofo`` for all she did for me. Extended thanks for her husband.

*To all my best friends for their support and encouragement.

*To you dear Safa; for being understanding and hardworking, not only this year, but along the five years we have been working together.

*To all my teachers for their support and compliments. Mainly, teachers of English.

*to the soul that matches mine, to the pure heart of innocence.

* To you Nadia; congratulation. Alhamdulillah; finally, you did it

Nadia Mahalleg.

DEDICATION

In the Name of Allah, Most Gracious, Most Merciful

All the praise is due to God alone

I dedicate this work to my beloved parents

Thank you for being supportive and understanding,

To my brother, my two sisters and especially my beloved grandmother Saida,

All the members of my family and all my friends

A special dedication goes to my precious friend Nadia,

With whom this work has been done,

Thank you for being the best.

Safa Khedimallah

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ABSTRACT

Vocabulary items are of major importance in the field of language teaching and learning. Researchers have proposed many investigations whose aim is to study the factors that may enhance teaching or learning vocabulary items. It is commonly found that students encounter difficulties when it comes to remembering new lexical items, thus, the need for effective teaching techniques is essential. The aim of the current research paper is to investigate to what extent the implementation of the vocabulary teaching technique labeled as Guessing-Errors-Correction-Memorization (GECM) is effective in enhancing students' memorization of lexical items. Subsequently, the hypothesis of the current study claims that student's memorization of lexical items is enhanced when they are previously exposed to guessing then correction of the same lexical items. The explanation of the major elements, which are errors in language learning and memory and their relation to teaching, is reflected in two chapters representing the theoretical part of this study. Additionally, the third chapter has been devoted to the practical part of the study. The later has been carried out in Zeggout Ismail Middle School where 48 pupils represented the sample of the experiment. The sample has been divided into two groups (experimental and control groups). As far as the practical part is concerned, the data are collected from the analysis of five different sets of activities presented in five lessons, in addition to a post-test carried out with both groups at the end of the teaching practicum. The results obtained from the interpretation of the data show a slight difference between the experimental and the control group. It has been found that the experimental group performs better in the matter of memorizing guessed and self-corrected lexical items. The difference has been attributed to the effectiveness of the GECM technique.

Key words:

Errors, Lexical Items, Memory, GECM, Retention.

LIST OF ABBREVIATION

ALM: The Audio-lingual Method.

CA: Contrastive Analysis.

GTM: Grammar Translation Method.

GECM: Guessing-Errors-Correction-Memorization.

ER: Error Analysis.

LAD: Language Acquisition Device.

UG: Universal Grammar.

L1: First Language.

L2: Second Language.

CAH: Contrastive Analysis Hypothesis.

EAH: Error Analysis Hypothesis.

SLA: Second Language Acquisition.

EFL: English as a Foreign Language.

STM: Short Term Memory.

LTM: Long Term Memory.

TEFL: Teaching English as a Foreign Language.

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General Introduction

1. Background of the Study

In the field of second language learning and teaching, various methods have been developed with each method having its principles and features that distinguish it from other methods. One significant point in which those methods differ is their ways of treating errors. When talking about errors in language teaching, the Audio-Lingual Method (ALM) is what first comes to mind, mainly because this method is famous for its complete rejection of errors. The ALM underlines its principles based onbehaviourist assumptions of Skinner. This theory emphasises error-free learning in which errors are not encouraged because they lead to bad habit formation. Accordingly, any kind of learning is seen as habit formation regulated by the relation of stimulus-response-reinforcement that,later on, results in a strongly formed habit.

Based on Behaviourism, Lado in 1957 introduced the concept of Contrastive Analysis (CA) to second language acquisition. Referring back to Byung-Gon, CA aims at comparing the features of L1 and L2 to find out any similarities and differences that may exist. Learners are found to transfer features of L1 to L2 learning in a positive and correct way when they transfer similar features. However, when transferring different features, they generate many errors and face many difficulties, and that is negative transfer. CA attributed these errors to L1 use; hence, many methods abandon L1 use to avoid errors (136)

CA has strongly been criticised for the lack of evidence concerning the origin of those errors and their possible inhibition of learning. Thus, Corder, in 1967, called for an analysis of those errors to find out their origins, and consequently, the concept of Error Analysis (EA) emerged. The latter is a systematic investigation of learners' errors that are seen as signs of learning rather than non-learning (Byung-gon 136)

Thanks to the publication of *the significance of learners' errors* by Corder in 1967, the negative vision and the misconceptions of errors, which ruled in the most of the teaching language methods, shifted in a positive way, and mistakes started to be considered inevitable and natural for the language process to succeed (Ciesielkienz and Marquez 120). Therefore, there was a noteworthy preference to deal with occurring errors rather than preventing them. Communicative language teaching provides an example of this shift in which language is merely created by individuals via trials and errors.

When dealing with learners' errors, teachers may employ different ways and strategies. One teacher might suggest correcting them as soon as they appear, while another could ignore them, and another would try finding ways to help learners based on these errors (Farouq 1). Correspondingly, this research paper adopts the third way that turns errors into good opportunities of learning. It,thus,predicts that producing an error as a result of guessing,so long as it is followed by self correction, will result in a better retention of the correct answer than simply directly being exposed to the correct answer from the outset without the learners' prior and conscious individual involvement.

In the learning process, teachers obviously want their students to memorize certain aspects of language, especially during the first stages. Lexical items are, in fact,someof the important aspects that students are mostly expected to memorize for better learning. It follows that many researchers have conducted studies for the purpose of finding more effectivetechniquesto help acquire essential vocabulary items.

Through time, many specialized methods have been developedfor teaching lexis with thoughtful consideration. Actually, some of them have brought interesting techniques for successfully memorizing vocabulary items; among testedones, repetition and drills have been very common. However, despite the apparent popularity and common use of the mentioned procedures, they have subsequently been recognized only limitedly effective. Moreover, other

methods have advocated the use of associations; although yielding good results, they are unfortunately not applicable to all types of students. In the field of EFL teaching/learning, many have been discouraged and have abandoned "committing errors" for learning since they are considered bad habits, for which the Grammar Translation Method (GTM) and the Audio-Lingual Method (ALM), among others, can be readily named. On the other hand, other methods insist on advocating the usefulness of errors, considering them as inevitable, indicating learning and not detrimental to it as long as they are corrected.

In accordance with this perspective, the present paper investigates the impact of predictable error making on helping students memorize vocabulary items once they are corrected by the instructor. The study being conducted suggests testing a new technique that supports the claim that making errors is not only a sign but also a tool for better learning. This technique consists of three major steps: first, driving pupils to make errors through encouraging them to guess, then systematically teaching them new vocabulary items, and lastly allowing self-correction of earlier errors in order to evaluate the extent of successful memorization of right answers.

2. Statement of the Problem

Although grammar is as important as vocabulary in the process of language learning and teaching, learners usually focus on grammar and pay little attention to vocabulary. This may be referred to the fact that the majority find it difficult to memorize and learn the different vocabulary items. Learning grammar at the expense of vocabulary does not lead to an effective mastery of language acquisition and thus, being a fluent speaker or a native-like speaker becomes an issue. With regard to teaching and learning English, the same problem has been noticed in the Algerian school; where most pupils neglect vocabulary learning. Since vocabulary is inductively taught in EFL classes and grammar takes the major focus, most pupils cannot recall and memorize the lexical items being exposed to. The present paper tackles the issue of lexical items memorization suggesting a technique that may enhance pupils' memorization of vocabulary through guessing and self correction. The technique is primarily referred to as the GECM throughout the research paper.

3. Aim of the study

This study aims at investigating the impact of error making followed by self-correction on pupils' memorization of vocabulary items. In the investigation, we aim to increase pupils' memorization by testing a technique (GECM) which suggests error-making as a procedure for better learning, more specifically, better retention of vocabulary items. In other words, the study aims to measure to what extend error-making followed by self-correction helps increase the memorization of lexical items.

4. Research Questions and Hypothesis

The study researches the following questions:

1. Is there a difference in the degree of memorization when pupils are asked to guess and when not?

2. Do pupils who are encouraged to guess, err, and self-correct perform well when recalling vocabulary?

3. Does committing errors and having them self-corrected maximize student's retention of vocabulary items?

The research is based on the following hypothesis:

Third year pupils of Zeggout Ismail middle school will memorize lexical items more effectively when they are taught through GECM technique.

5. Means of the study

In order to test whether making errors while guessing and having them,later on,self-corrected is beneficial to maximize student's retention of the proper answer, an experimental study has been carried out. The data of this study have been collected from an action research done with two classes of third year in Zeggout Ismail middle school, Jijel .The two groups have been randomly selected making the experimental and the control groups of this study. The experimental group has at least been tested for a period of one month where sets of different activities have been given to the considered pupils. The sets of activities have been given at the beginning of each session for the pupils to guess some of the new vocabulary items to be covered in the lesson. It is worth noting that the experimental group is encouraged

to commit errors;these are not immediately corrected by the teacher, rather left to be self-corrected when the new language forms are introduced. While the teacher explains the lesson, and introduces the new language forms, the pupils under study are asked to correct any recognized errors. At the end of the session, the teacher makes sure that all pupils have corrected their errors. If not, a group correction is to be done. In the remaining sessions, the teacher is not to introduce new language since working on the same lexical items until the next lesson. At the end of the experiment, a simple post-test is given to both groups in order to verify which group better recalls the vocabulary items having been taught.

6. Participants of the Research

In this study, the participants are 3rd year middle school pupils, between 13-15 years old, and divided into two groups (control and experimental) of 24 students each. The participants are all of Zeggout Ismail middle school of the county of Jijel. These pupils are kept unaware of the study under execution, helping the experimentto develop in as natural teaching/learning situation as possible. Second, the two constituent groups are of mixed abilities according to their teacher; which helps avoidbias resultingfrom disparity but ensures group homogeneity.

7. Structure of the Study

The present research paper is divided into three chapters. The first and the second chapters review the theoretical basis of the study. The first chapter entitled "Linguistic Errors in Language Learning" consists of explanations and exemplifications of the major aspectsof linguistic errors in language learning. Defining 'errors', describing the corresponding theories in EFL learning, specifying the types and sources of errors, highlighting their significance, showing ways to correct them, and delineating diverse attitudes towards them represent the

componential aspects dealt with in this chapter. The second chapter entitled "Human Memory and Forgetting" is divided into two sections. In the first section, "Human Memory" evolves into the definition of memory, memory systems, and its majorprocesseswhile the second section, "Forgetting and Lexical Items", encompassesthe definition and reasons of forgetting in general and lexical items in particular, and teaching vocabulary through GECM technique. The third chapter is naturally devoted to analyzing, discussing, and interpreting the data obtained bythe experiment.

Chapter One: Linguistic Errors in Language Learning

Introduction

Making errors is a natural, human phenomenon in various fields. Many definitions have been given to the term 'errors'. Lennon in 1991 defined errors as "a linguistic form or combination of forms which in the same context and under similar conditions of production would, in all likelihood, not be produced by the speakers` native speakers counterparts" (Maicusi, Macusi, and Lopez 1). The concept of errors has emerged back in the 1950`s with reference to the assumptions of Behaviorism. At that time, errors were considered as negative and unwanted during the teaching/learning process. With the emergence of Mentalism, led by Noam Chomsky, errors were no longer seen as a sign of failure and a reflection of the lack of competence, but rather as an evidence of learning and a reflection of the level of advancement (Kocieniewska4). The claims and the criticism of Chomsky against Behaviorism were the starting point for the emergence of many following theories. The latter, tried to put Chomskyian ideas into test and so Contrastive Analysis hypothesis emerged (CA). Based on the shortcomings of CA, another hypothesis came to be known as Error Analysis (EA).

The concern of this chapter is to discuss all that is related to errors, mainly, the different views towards errors, the types of errors, sources of errors, the importance of errors, ways of correcting errors, as well as teachers' and students' attitudes towards errors.

1.1.   Errors Vs. Mistakes in Language Learning

The terms 'errors' and 'mistakes' are often used interchangeably. Many linguists have further distinguished between the two, claiming that errors occur when the deviation comes as a result of the lack of knowledge, while mistakes take place when learners fail to perform their competence (Maicusi, Maicusi, and Lopez 170).

Corder in 1967 claimed that a mistake "…is a lapse that reflects processing problems. An error, on the other hand, is a deviation in learner language which results from the lack of knowledge of the correct rule". In other words, if grammatical or structural rules are broken, a mistake has been made. Pit Corder in 1991 stated, "A mistake is not an issue of knowledge, but it is an issue of its application" (qtd.in Valero et al. 23). In another way, mistakes are not systematic they are just "slips of tongue", they occur when the learner fails to perform grammatical rules that he possesses about the language. Simply, mistakes are a matter of performance. On the other hand, errors are systematic; they are the results of lack of competence. Whenever there is a gap in language rules, an error is likely to take place. Referring back to Rod Ellis:

> An error … represents a lack of competence …, a mistake occurs when learners fail to perform their competence. That is, it is the result of processing problems that prevent learners from accessing their knowledge of a target language rule and cause them to fall back on some alternative, non-standard rules that they find easier to access. (51)

By way of explanation, unlike an error that is the absence of the language rule, a mistake is the failure to perform and abide by the language rule. The learners encounter performance problems such as (stress, anxiety, fatigue …) that drive them to choose the easiest alternative utterance that comes in mind, this results in mistakes

1.2. Theories about Errors in Language Learning

During the past few decades, various changes took place in the field of language learning and teaching. Several theories and methods with different assumptions developed and marked considerable distinctions. Among the prominent distinctions between theories of language learning, is their view towards errors. Behaviorism, Mentalism, Contrastive Analysis, and Error Analysis and their different views towards errors in language learning are the major elements included in this part.

1.2.1. Behaviorism and Errors in Language Learning

Behaviorism is basically a psychological theory founded by J.B. Watson in the 1950′s and later popularized by B.F. Skinner. It is a general theory of learning in which learning is considered as habit formation caused by the repeated patterns of stimulus, response, and reinforcement (Lennon1). Behavior theorists define learning as a more or less permanent change in behavioras a result of experience or practice. Accordingly, learners are born as a tabula rasa where their knowledge is obtained through the interaction with the environment. Thus, learners are viewed as passively adapting to environmental stimuli to which they give different responses that are reinforced later. While the desirable responses deserve a verbal or non-verbal reinforcement for the sake of encouraging and forming good habits, the undesirable responses, on the other hand, should be eradicated and suppressed at all costs to avoid developing bad habits (Kocieniewska 1).

With regard to language learning and teaching, the behaviorist view sees learning a language as any other type of learning regulated by the relation of stimulus, response, and reinforcement. Learners are given linguistic stimuli (a question or a sentence to put in the passive voice...) then, after responding, they are told by their teacher whether their answer is right (positive reinforcement) or wrong (negative reinforcement). The teacher should

right (positive reinforcement) or wrong (negative reinforcement). The teacher should encourage learners to repeat correct forms, while he should correct their mistakes immediately when they occur so that bad habits are not formed (Lennon 1-2). In other words, learning takes place if the correct response towards a stimulus is confirmed,and that learners must receive a feedback on whether their answers are correct or not.

Based on the aforementioned claims, the behaviorists view errors as something unwanted, as a symptom of ineffective teaching, and an evidence of failure in language learning and teaching.The Audio-lingual Method, alternatively called the aural-oral approach, is the perfect representative of Behaviorism's assumptions in language learning. The method has its origins back to World War II where it was used to teach and rapidly develop soldiers' oral proficiency. Based on the method assumptions, learning a foreign language is a matter of habit formation where errors are regarded as a failure and a bad sign of learning. Thus, teachers are supposed to prevent learners from committing errors. As long as learners do commit errors, teachers punish the bad habits or provide immediate corrective feedback and make an effort to get students produce error-free utterances. At the same time, successful responses and correct habits are positively reinforced.

1.2.2. Mentalism and Errors in Language Learning

The Mentalist language theory was first developed in America in the 1960's by Noam Chomsky and later by Eric H. Lenneberd. The Mentalist language theory came as a reaction to the Behaviorist language theory developed by B.F Skinner and as a contradiction to its principles and main concepts (Demirezen153). Chomsky explained that the process of language acquisition is not a habit formation but rather, mentally and structurally governed. According to his beliefs, first language acquisition and second language acquisition are

Acquisition Device (LAD). Besides, in contradiction to the view of Behaviorists, the Mentalists consider the environment as less important during language acquisition. They explain that it is not enough for a child to acquire a language by mainly listening and miming the surrounding. Nevertheless, children are able to produce an infinite number of utterances they have never heard before, because they possess a device (LAD) that helps them proceed and develop the information they receive from the surrounding (Oyelakin194).

When it comes to errors, Mentalists consider them as an evidence of learning and a tool to measure the level of advancement (Kocieniewska 1). Based on theirtheory, there is one sole framework for all languages called Universal Grammar (UG).Referring back toEllis, if learners succeed to acquire it, they will be able to cope with all possible languages. During the process of acquiring a language, the learnerexperiments and tests whether the linguistic forms he/she knows fit withparticular contexts. As a result, committing errors is a normal step that a learner passes through during the process of language acquisition. The mentalist theory gavecrucial importance to errors' occurrence during the process of language acquisition. It was the first theory that paid attention to the difference between "errors" and "mistakes" (qtd. in Kocieniewska 1). Besides, it was the first theory to see errors as a positive sign of the progress of the learner's language acquisition. Mentalists used to collect recordings and pieces of writings, and then search for errors and analyze them. This in fact, paved the way for the coming theories and approaches to study and considererrors, such as Contrastive Analysis and, later, Error Analysis.

1.2.3. Contrastive Analysis and Errors in Language Learning

Contrastive analysis (CA) was first founded by Charles Fries in 1945 and later was popularized by Robert Lado in the 1950′s. It was founded based on the assumption that second language learners tend to transfer the features of their native language to their utterances in the second language. As it is claimed by Lado in 1957,"individuals tend to

transfer the forms and the meanings and the distribution of forms and meanings of their native language and culture to the foreign language and culture" (qtd. in Byung-gon 135).By 'transfer', Lado refers to carrying the features of the native language into the foreign language.

Ellis defines CA as "a set of procedures for comparing and contrasting the linguistic system of two languages in order to identify their structural similarities and differences". Thus, CA predicts that the native language influences the learning of a second language ; knowing that similarities existing between two languages help facilitate learning whereas differences lead to difficulties and errors (qtd. in Mutemaand Mariko 222-223). In other words, CA claims that errors take place when there is interference (negative transfer) between L1 and L2 where learners transfer L1 habits into L2 making errors whenever there is a difference between the two languages. As Lado says, "these differences are the chief source of difficulty in learning a second language" (qtd. in Byung-gon143).

1.2.4. Error Analysis and Errors in Language Learning

Back into the 1940's, Error Analysis (EA) was highly influenced by Behaviorism (Kazemian1). Before the publication of Corder's seminal paper "The Significance of Learner's Errors" in 1967, researchers' attention was directed towards studying the teaching perspectives and all that had a relation with Contrastive Analysis, Behaviorism and Structuralism. However, their attention shifted to the study of the Learning perspective in relation to Cognitive Psychology ("Error Analysis"). EA as a method consists of documenting language learners' errors, determining their origin, and (if possible) explaining their cause (http://carla.umn.edu/learnerlanguage/error_analysis.html).Researchers used to believe that the interference of L1's aspects with those of L2 was the main source of error occurrence during second language learning process. But, it is due to EA findings that it was made clear that L1 and L2 interference was not the only source of errors and not even the most important

one. By this, EA widened the perspective of errors and went further to predict other possible causes for them. This shiftwas considered as a reaction to Contrastive Analysis (Khansir).

Another significant change, EA brought to the field of applied linguistics in general and second language acquisition in specific,was that it made learner's error appear in a different perspective. Errorswere no longer considered as "signs of inhibitions" (Corder), but rather as useful tools to understand strategies of learning and promote those of teaching. Therefore, Errors are now considered as perfectly natural aspects of second language acquisition.

1.2.5. Contrastive Analysis vs. Error Analysis

Both CA and EA complement each other; they are both concerned with the same problems but from different points of view. Both approaches deal with the study of errors' occurrence in second language learning. Some errors can be accounted for by CA, which states that errors are the result of the native language interference with the target language. While others can be accounted for by EA that assumes that errors take place due to the gap in the knowledge of the target language rules (Mutema and Mariko 218).

EA is considered a weaker version of Contrastive Analysis Hypothesis (CAH). Mc. Laughlin in 1987 states that, "unlike CAH which is concerned with finding the nature of learner's errors, Error Analysis Hypothesis (EAH) seeks further to determine the source of such errors in order to learn more about interference and development" (qtd. in Mutema and Mariko 219).

CA has a prior detection of errors that is a predictive power of errors. It can predict errors before the learners make them based on the differences between L1 and L2, while EA has a posterior detection of errors; after errors have been made, EA explains their source (Byung-gon 145).

CA that has a descriptive power, it describes the similarities and the differences of the two languages (L1 and L2); focusing more on the differences as they lead to errors. Whereas, EA has an explanatory power; it explains the source of learners' errors.

1.3.   Types of Errors in Language Learning

The study of the types of errors that occur in language learning has taken a major part in Error Analysis. Error taxonomies are a huge section in EA. Dulay, Burt, and Krashen in their discussion about taxonomies focused on "taxonomies that classify errors according to some observable surface feature of the error itself without reference to its underlying cause or source." They are labeled "descriptive taxonomies". The most commonly used taxonomies are based on: (1) linguistic category, (2) surface strategy, (3) comparative analysis, and (4) communicative effect (145-146).

1.3.1. Errors Based on Linguistic Category

This type of taxonomies classifies errors according to the language component or linguistic constituent (or both of them) which are affected by the error. Language components consist of phonology, syntax and morphology, lexis and semantics, and discourse. The linguistic constituents "include the elements that comprise each language component." (Dulay, Burt, and Krashen146)

1.3.1.1. Errors of Phonology

Phonology, in general, is defined as "the study of how sounds are organized and used in natural languages" (Loos et al.). Phonological errors are errors related to pronunciation and the production of wrong sounds. An example of a phonological error can be found within Arab English speakers where the letter "p" is pronounced /b/. Some of these speakers may pronounce the word "park" as /bark/; here a phonological error takes place.

1.3.1.2. Errors of Syntax and Morphology

The terms syntax and morphology are often related to grammar. Morphology is the study of word forms, whereas syntax is the study of sentence structure. A syntactic error is an error that occurs within the order of words in a sentence. A sentence like "My mother prepares dinner always" contains a syntactic error where the adverb of frequency "always" is misplaced. A morphological error is an error that encompasses wrong formation of words. The production of the word "childs" for example is a morphological error because the word is an irregular plural.

1.3.1.3. Errors of Lexis and Semantics

Lexicon is the vocabulary of a particular language orthe vocabulary of a branch of knowledge such as medical lexicon. While semantics is defined as a partof linguistics that studies the meaning of words and sentences (Assimakopoulos 4).In the study of errors, a lexical error is an error produced due to the wrong selection of words (vocabulary).Yet, a semantic error is an error related to wrong meaning. When a learner produces the utterance "the people are studying" instead of "the pupils are studying", a lexical error has taken place.

1.3.1.4. Errors of Discourse

The word discourse according to Merriam-Webster Learner's dictionaryis defined as "the use of words to exchange thoughts and ideas". An error of discourse is an error of style, it is grammatically correct at the level of the sentence but within the context it is not interpretable.For example, "I want to know English" seems to be a correct utterance at first sight, but after analyzing the context and knowing the intention of the speaker, the use of the verb "to know" is considered an error. Knowing that the real intention of the speaker is to learn English as a language,it is then more appropriate to say, "I want to learn English." Discourse errors, in this case, are evident only in context; they are discourse level (Valero et al. 23).

1.3.2. Surface Strategy Taxonomy

In this taxonomy, the way in which surface structures are altered is focused on. The division of errors according to this taxonomy is: (1) errors of omission, (2) errors of additions, (3) errors of misformation, and (4) errors of misordering. It is important to point that omission errors occur more frequently in the early stages of L2 acquisition, whereas the other errors are more common in the intermediate stages (Dulay, Burt, and Krashen 150-155).

1.3.2.1.   Errors of Omission

In a well-formed utterance, all components are present. If one component is absent, an omission error has occurred. Studies provide evidence that grammatical morphemes such as noun and verb inflections, prepositions, and articles are omitted more often than content morphemes (Dulay, Burt, and Krashen 154-155). An example of an error of omission can be

found in an utterance such as "My mother teacher." where "is" and the article "a" are omitted.

1.3.2.2. Errors of Addition

In contrast with omission, addition relates to the presence of an extra item that must not be present in a well-formed utterance. According to Dulay, Burt, andKrashen "these errors are good indicators that some basic rules have been acquired, but that refinements have not yet been made." (156). In this type of errors, three categories have been observed in the speech of both L1 and L2 learners: (1) Double markings, like in "she did not revised her lessons" where the application of the past simple is double marked on both the verbs "do" and "revise". (2) Regularizations, like in "goed" instead of "went", where the rule of the regular is used to produce the irregular resulting in such type of errors. (3) Simple additions, which take place when it is neither double-markings nor regularizations;this includes the rest of additions of any extra items in a well-formed utterance, (Dulay, Burt, and Krashen 156-158).

1.3.2.3. Errors of Misformation

Misformation errors refer to the "use of the wrong form of the morpheme or structure." There are three types as well: (1) regularization, where an irregular marker is replaced by a regular one, as in "informations" instead of "information". (2) archi-forms which refer to "the selection of one member of a class of forms to represent others in the class…" (Dulay, Burt, and Krashen 160), like for example the selection of the demonstrative article "this" where other articles should be used. (3) Alternating forms are represented by "free alternations of various members of a class with each other." (Dulay, Burt, and Krashen 157).

1.3.2.4.   Errors of Misordering

An error of misordering refers to an utterance where a morpheme or a group of morphemes is incorrectly placed. This type of errors occurs more specifically with direct and embedded questions with both L1 and L2 learners (Dulay, Burt, and Krashen 162). An example of a misordering error can be found in the utterance "I saw with you her." Where the personal pronoun "you" is misplaced, leading to the occurrence of a misordering error.

1.3.3. Comparative Taxonomy

In comparative taxonomy, errors are classified on the basis of comparing the structures of errors that occur in L2 acquisition to other types of constructions, most commonly to errors made by children during their L1 acquisition of the language in question. In this taxonomy, two main error categories are included: (1) developmental errors and (2) interlingual errors. Two other sub-categories are included, where they have been derived from the first ones. (3) Ambiguous errors and (4) 'the grab bag' category of other errors. (Dulay, Burt, and Krashen163-164).

1.3.3.1.   Developmental Errors

According to Naves, "Developmental errors are assumed to be a natural product of a gradually developing ability in the new language … (they) make up the majority of errors exhibited by second language learners." (http://www.ub.edu/filoan/U1SLAforCLIL.html). In other words, developmental errors are originated from the L1 interference. Referring back to Richards, "Developmental errors occur when the learner attempts to build up hypotheses about the target language on the basis of limited experience." (qtd. in Ferrer). An example of such errors can be found in an utterance like "dog eat it", produced by a Spanish child learning English. Here, the omission of the article "the" and the non-use of the past simple

tense are regarded as a developmental error because they are also found in utterances of children learning English as their L1 (Dulay, Burt, andKrashen165).

1.3.3.2. Interlingual Errors

Dulay, Burt, and Krashen describe interlingual errors as being "similar in structure to a semantically equivalent phrase or structure in the learner's native language." (171). By way of explanation, if a second language learner produces a wrong utterance which is similar in structure to his /her mother tongue, an interlingual error takes place. An example of this type of errors can be found in "My friend has taken us a photo." produced by French learner of English reflecting the word order in French version: "Mon amie nous a prisune photo."

1.3.3.3. Ambiguous Errors

Ambiguous errors can be classified with both developmental and interlingual errors. They reflect the learner's native language structures (developmental) as well as they can be found in errors produced by children acquiring their L1 (interlingual). ((Dulay, Burt, and Krashen172). For example, "I no have money." produced by an Arab learner of English. The utterance contains an ambiguous error where the learner's native language structure is reflected (the word order in a sentence) in "انا لا املك المال". In addition, it is an utterance that can be found within errors of children learning a first language.

1.3.3.4. Other Errors

This category of errors does not belong to any of the other categories of this taxonomy. The example provided by Dulay, Burt, and Krashen, "she do hungry", is produced by a Spanish learner of English. The latter did use neither her mother tongue structure (the use of *have* for *is*) nor L2 developmental features (like the complete omitting of the auxiliary have. Such an error is considered to be of other errors (172).

1.3.4. Communicative Effect Taxonomy

This taxonomy describes errors that have an effect on the listener or the reader. Dulay, Burt, and Krashen argue, "Errors that affect the overall organization of the sentence hinder successful communication, while errors that affect a single element of the sentence usually do not hinder communication" (189). The former is called (1) global errors and the latter is called (2) local errors.

1.3.4.1. Global Errors

Burt in 1975 claimed that errors that interfere with the entire message are global errors (qtd. inCorpuz35). Global errors interfere with communication and disrupt the overall meaning of utterances such as using the wrong word order in a sentence or using inappropriate utterances. For example, "I with you saw her" is an incorrect utterance. The speaker misplaced the elements of the sentence, which led to a misunderstanding in the message delivered. The correct placement of the elements is "I saw you with her." According to Dulay, Burt, and Krashen, global errors include (1) wrong order of major constituents like in the example above, (2) missing, wrong, or misplaced sentence connectors like in "She will be happy until (*when*) she succeeds", (3) Missing cues to signal obligatory exceptions to pervasive syntactic rules like in "The apple (*was*) eaten (*by*) Hana.», and(4) Regularization of pervasive syntactic rules to exceptions like in "That delicious cake enjoyed having me" instead of "I enjoyed having that delicious cake" (191).

1.3.4.2. Local Errors

Local errors are minor violations with no effect on the meaning even out of context (Corpuz35). Local errors are errors that do not hinder communication or the comprehensibility of utterances such as the use of articles, prepositions, or nouns.

For instance, "The fish lives the sea." is an incorrect sentence. The speaker did not use the article "in" to refer to the sea, yet the meaning remains clear. Such local errors do not impede the message as the reader can make an accurate guess about the intended meaning (Touchie76).

1.4. Significance of Errors in Language Learning

The importance of learner's errors during the process of language learning has been widely discussed in the field of SLA. During the Behaviorist era, student's errors were given less attention. Learners were not allowed to commit errors. Their Errors were considered as a negative sign and were eradicated, thus the study of their importance did not exist. It is after the coming of the Mentalist theory that the view towards error changed. Many linguists started to conduct research in the field of errors and all that concerned errors, including their importance during the process of language learning.

1.4.1. Significance of Errors for Researchers

Errors are found to be significant for researchers. First, they are symptomatic. In other words, they help researchers know what and how the process of language acquisition is held in learners' minds. Furthermore, errors enable researchers to gain insights on how language is learned. Through errors, it is possible to study and understand better the process that learners follow during the acquisition of language, what strategies or procedures they employ in their discovery of the language. As stated by Corder in 1967 "a learner's errors … are significant in (that) they provide to the researcher evidence of how language is learned or acquired, what strategies or procedures the learner is employing in the discovery of the language."

1.4.2. Significance of Errors for Teachers

Learners' errors are said to be beneficial for teachers as well. There are many different aspects in which errors' occurrence is seen significant for teachers. First, they serve as a means to determine the current level of learners. In other words, teachers can determine what learners know and what they do not, how far they have progressed and what remains for them to learn. In addition, errors are the key to verify whether the designed objectives have been achieved or not. Thus, whether they can move on to the next item or work more on the same objectives. Moreover, it is on the basis of learners' errors that teachers can evaluate the effectiveness of their teaching materials. Errors help to promote appropriate pedagogical tools and decide if any modification of the teaching materials and procedures is required (Zhu 127-128).

1.4.3. Significance of Errors for Learners

In fact, errors have been found to be essential for learners themselves. As for language learners, learning a language is a process of discovering the rules underlying this language by processing the data given by the teacher. Errors making, then, is inevitable being a result of processing a given language (Zhu127). They are a good sign that learners test their hypotheses about the nature of the language they are learning (Corder167). Through testing the new language and making errors, learners can evaluate to what extent they have progressed. Moreover, learners can learn from errors they commit and remember both the problem and the solution (if corrected). Furthermore, making errors provide an evidence for learners about their current limits and restrictions.

To conclude, Selinker in 1969 confirmed the aforementioned points by stating that errors are significant in three respects. First, they are quiet important for researchers as they enable them to generate insights into how language is learnt. Second, they are important for the

teacher because they help to determine the learner's advancement in language learning. Finally, errors are important to learners as well because they help them to determine their levels (qtd. in Touchie76).

1.5. Sources of Errors in Language Learning

Some errors can be accounted for by CA as a result of the mother tongue interference, while some of them can be accounted for by EA which claims that errors occur not only due to the mother tongue interference, but also due to the gaps in the second language rules (Mutema and Mariko 218).

1.5.1. Contrastive Analysis View

Contrastive Analysis claims that the mother tongue is a fundamental source of errors during the process of learning a second language. Learners tend to apply the knowledge of their mother tongue to the second language, resulting in negative transfer. The latter comes out from the differences that exist between the two languages. The greater these differences are, the more negative transfer is likely to occur. The fact that negative transfer occurs demonstrates the occurrence of errors. Therefore, the mother tongue is the key source of errors with regard to CA.

1.5.2. Error Analysis View

With the emergence of EA, it becomes clear that the differences between two languages are not sufficient to account for errors. But, there are many other sources, next to the mother tongue, from which errors originate.

Richards, in 1971, distinguished between three sources of errors. First, he recognized interference errors which are the result of using elements of the mother tongue when learning

another language. They are alternatively known as interlingual errors. Second, intralingual errors reflect general characteristics of language rules. Finally, he identified developmental errors which take place when learners try to build up hypotheses about the target language based on their limited experience. Richards further divided intralingual errors into sub categories. He suggested four causes of these errors:

(1) Overgeneralization: applying a rule where it cannot be applied, e.g., "He goed to school". The use of "-ed" reveals how the learner applied the past simple rule where it is not applicable.

(2) Ignorance of rules restriction:applying a rule in a wrong context, e.g., "He made me to go" instead of "He asked me to go".

(3) Incomplete application of rules:failing to use a complete structure of a rule, e.g., "you like football "instead of "do you like football?".

(4) False hypothesis:failure to fully understand a distinction in the target language, such as the use of "was" as a past time marker in "Yesterday it was happened (qtd. inHeydariand Bagheri1584).

1.6. Ways of Correcting Errors in Language Learning

Errors are a natural outcome of the learning process; they are evidence that learners are trying to learn a new language. In order to help learners develop their interlanguage system, errors should be corrected. Errors correction takes various methods witheach method having its pros and cons. There are usually three ways of correcting learners' errors:

1.6.1. Self-correction

Self-correction can be defined as the ability to recognize a problem and make some efforts to solve and fix it immediately. In this method, students try to correct the errors they have made on their own. This makes the correction memorable as they work out their errors by themselves. Thus, self-correction is vital as stated by Scrivener in 2005,"people learn more by doing things themselves rather than being told about them" (qtd. in Ellis and Shintani 254). Also, students are likely to remember both the problem and the solution and feel comfortable having recognized their own errors (Shafaei 278). Furthermore, this helps students take responsibility of their own learning and encourages independence from the teacher. On the downside, students may not understand how to self-correct or may not be able to recognize their errors leading possibly to the reinforcement of errors. As Arntsen stated, the teacher can get students to self-correct through different ways, as through repeating what the student said with an emphasis on the incorrect part in a questioning way, e.g., "I have play baseball?; here, the student has a chance to revise his production. Also, the teacher may use facial expressions or saying gently that the answer is wrong (http://busyteacher.org/3723-how-to-correct-mistakes.html).

1.6.2. Peer Correction

Peer correction is another way to deal with errors in teaching the class. In this method, students provide correction for each other under the teacher's control. Some learners are unable to correct themselves;the teacher, then, calls on a student to correct his peer′ errors or ask the whole class to provide a correct answer for the same question. So, the teacher emphasizes the correct answer by writing it on the board and explains why it is correct. In this way, he would shift the focus away from

the student who gave an incorrect answer. (http://busyteacher.org/3723-how-to-correct-mistakes.html).

Peer correction supports cooperation and makes the whole class involved in the lesson. Edge (1989) believes that peer correction is quite beneficial in the learning process. First, it involves a great number of learners in the lesson and supports teamwork. Second, it motivates those silent students to take part in the process. Finally, peer correction tends to be at a level the whole class can understand (qtd. in Mishra68). On the downside, some students are highly resistant to being corrected by someone other than their teacher, while some others just do not prefer to correct their peers. As Lee (2002) sustains that learners may not feel at ease correcting their classmates' errors for fear of embarrassing them (qtd. in Jurkowitiz 125).

1.6.3. Teacher Correction

Teacher correction is probably the most common and overused method of correction in EFL classes. Sometimes neither a single student nor the entire class succeeds to give the correct answer or having no idea what the answer is. The teacher has to provide the correct answer in case hints and examples do not lead to the answer. The teacher then can ask similar questions in a simpler form so to restore students' confidence (http://busyteacher.org/3723-how-to-correct-mistakes.html). The teacher helps students to identify their errors and gives them immediate and accurate explanations as well as reliable answers. On the downside, teacher to student errors correction creates a teacher-centered classroom. Students stop taking responsibility of their own learning, relying on their teacher, and stop noticing their errors.

1.7.   Attitudes towards Errors in Language Learning

In the past, it was believed that a typical learning of language was error-free. Errors had no place to occur during the language acquisition process. On the one hand, teachers used to view errors as a negative sign and provide immediate corrective feedback when they occurred. On the other hand, learners used to fear errors and avoid making them. Later, the view towards errors shifted and they started to be considered. Both teachers and learners started viewing errors as a positive and a natural outcome in the process of language learning. Yet, now, not all teachers nor all learners consider error occurrence and correction as welcome in classrooms.

1.7.1. Attitudes towards Errors Occurrence

Errors occurrence in language learning concerns both teachers and learners. Just like teachers, learners have their own attitudes towards committing errorsand thus, towards errors occurrence.

1.7.1.1.   Attitudes of Teachers

Teachers' attitudes towards errors can be divided into two groups. The first one is teachers who dislike errors occurrence during language learning. This type of teachers is influenced by the claims of Behaviorism, where errors occurrence is considered a negative response. In other words, they believe that the occurrence of an error refers to the failure of their teaching. The second one is teachers who have no problem with regard to errors occurrence. This type of teachers is influenced by the ideas of Chomsky and the claims of second language acquisition theories where errors occurrence is viewed as an inevitable part of the learning process. Therefore, these teachers see errors as a natural sign of learning. For them, if learners commit errors, it is because they are trying to learn.

1.7.1.2. Attitudes of Learners

Attitudes towards errors occurrence do not concern only teachers but learners as well. First, some learners have no problem in committing errors. This type is said to be "risk-takers" because they take risks not caring whether they are correct or not. These learners are known for preferring fluency at the expense of accuracy. Thus, they rush to produce utterances even if they doubt their correctness. Second, other learners are said to be "non-risk-takers" because they do not take much more risk unlike the former. They prefer to be silent rather than saying something they doubt it is wrong. Thus, they usually speak when they are sure (Ferdus12).

1.7.2. Attitudes towards Error Correction

In language learning and teaching, whenever errors occur, correction is likely to take place. In fact, the view towards errors correction differs from teachers to learners as well as amongst teachers and learners themselves.

1.7.2.1. Attitudes of Teachers

Teachers develop both negative and positive attitudes towards error correction. According to Krashen (1982), some teachers believe that insisting upon the correction of errors may discourage learners as it may raise their level of anxiety. As a result, this act impedes language learning (qtd. in Zhu 28). According to Corder (1967), on the other hand, "if we were to achieve a perfect teaching method the errors would never be committed in the first place, and that, therefore, the occurrence of errors is merely a sign of the present inadequacy of our teaching techniques" (qtd. in Zhu 128). Hence, such type of teachers supports error correction. They even believe it is necessary to provide corrective feedback in order to prevent learners from creating false hypothesis and fossilization.

1.7.2.2. Attitudes of Learners

It is normal for learners to develop an attitude towards error correction since it concerns their own errors. Yet, learners' attitudes towards error correction differ as well. Some learners do not like to be corrected constantly. Walker (1973) conducted a study wherein the results revealed that learners preferred not to be corrected for each error they commit. The reason is that correcting their errors undermines their confidence (qtd. in Martinez 3). Other learners prefer frequent correction as they believe it promotes their learning. Error correction for some of them is a way to confirm their previous built-up hypotheses (Zhu 128).

Conclusion

In fact, errors have taken a large concern of research in SLA. Errors in the past used to be forbidden and unwanted in the process of language learning.Later, a positive shift occurred in that viewrendering errorspedagogically meaningful. Various studies have then been conducted to investigate the role, the importance, the types, and all that concerns errors. It is important to specify that, in the present research paper, errors are considered according to the perspective valuing their positive effect as to be regarded a good opportunity of learning requiring appropriatehandling.

Chapter Two: Human Memory and Forgetting

Introduction

One of the central areas of cognition studied by psychologists is memory. The latter is defined by Eliasmith as the "general ability, or faculty that enables us to interpret the perceptual world to help organize responses to changes that take place in the world" (qtd.in Lutz and Huitt 1). In the field of language learning, memory or memorization is of a high importance because no learning is effective unless it is remembered. That is why the study of memory and how learners memorize the new input (L1 or L2) have taken the attention of many researchers. The failure of memorization results in what is called forgetting. It is another concept that has attracted considerable investigative attention. The aim of much of this investigation has been the reasons that lead to forgetting and the techniques used to fight such a phenomenon.

The concern of this chapter is to shed light on the major components of both memorization and forgetting in relation to the field of language teaching and learning. Thus, this chapter is divided into two sections; the first is devoted to memory and its main elements whereas the second section is concerned with forgetting and its reasons as well as some innovative techniques of teaching vocabulary that help reduce forgetting in learning.

Section One: Human Memory

The main concern of this section is human memory. Memory is a vague area of study related to different fields. In the current research paper, memory is dealt with in relation to the field of language learning. Thus, elements related to memory in language learning are included. The process of memorizing the input when learning a language involves passing through three memory systems (sensory, short term memory, and long term memory). Processing the input equally involves three sequential stages (encoding, storage, and retrieval).

2.1. Definition of Memory

2.1.1. Operational Definition of Memory

According to the Oxford Living Dictionary, memory is "the faculty by which the mind stores and remembers information" ("Memory"). A more specific definition is found in the Merriam Webster Dictionary, where memory is defined as "the power or process of reproducing or recalling what has been learned and retained especially through associative mechanisms" (``Memory``). By way of explanation, memory is the ability to recall information previously stored in the brain. This process of recalling information takes place with the help of some mechanisms.

2.1.2. Theoretical Definition of Memory

Based on Sternberg definition, "Memory is the means by which we draw on our past experiences in order to use this information in the present" (qtd. in McLeod 2013). Without memory, the abilities to learn from the past, operate the present and even think about the future are absent. This is because memory is the source of the large information each human possesses. This information takes many different forms including images, sounds, or

meaning. Another definition for memory was given by Eliasmith as the "general ability, or faculty, which enables us to interpret the perceptual world to help organize responses to changes that take place in the world" (qtd. in Lutz and Huitt1). This definition implies that there should be a structure in which new stimuli are incorporated into memory.

Many studies were carried out for the aim of studying the system of memory. It has been found that the work of human memory can be compared to that of a computer's. The term memory then has been defined as an information-processing modal; where information passes through three discrete stages: encoding, storage and retrieval.

2.2. Memory System

Many psychologists use the three storage model, proposed by Richard Atkinson & Richard Schiffrin in 1968, in order to describe the second process of memory that is storage. It is also called the modal model. Based on this model, information passes from store to store in a linear way and stored sequentially in three memory systems: sensory memory, short term memory, and long term memory. Each system is a unitary structure with its own characteristics of encoding, capacity, and duration (McLeod 2007).

2.2.1. Sensory Memory

The sensory memory is the first memory system proposed by the three-storage model. According to Randal, sensory memory is "...where essential information is extracted from the mass of stimuli coming into the brain" (qtd. in Rahmatian and Armiun 48). Although sensory memory has a large capacity, the information stored is meaningless unless it is selected for further processing. This type of memory

holds information for a short time i.e., works for a very brief period of time of about 150-500 msec for visual information and 1-2 sec for auditory information (May and Einstein11). According to Clause, the sensory memory absorbs a lot of environmental information. It also provides the brain with many details in a short period of time. Individuals are not merely seeing and recognizing objects or hearing and recognizing sounds around them. Indeed, their eyes are seeing colors, textures, sizes and shapes. Their ears are hearing tone, pitch and loudness. In other words, it receives information through the stimulation of the senses such as, sight, touch, taste, hearing, and smell, but only a fraction of all this is remembered. Information is detected by the sense organs and enters the sensory memory.

2.2.2. Short Term Memory

Short term memory is the second memory system proposed by the three-storage model. It is alternatively called 'Working Memory'. It is a system used to store and process information that are being thought about. Unlike the capacity of the sensory memory, the STM's capacity is much smaller. Some of the information in the sensory memory is selected for further processing in working memory. Besides, Sensory memory operates information unconsciously, while the working Memory operates consciously as a computer as it allows a person to comprehend, to retrieve, and to manipulate information. If this information is not practiced and rehearsed, it dissipates in about 18 seconds. It can be kept longer through the use of chunking (May and Einstein 14-15). Referring back to Lutz and Huitt, "this stage is often is often viewed as active or conscious memory because it is the part of memory that is being actively processed while new information is being taken in" (4).

2.2.3. Long Term Memory

LTM is the third memory system proposed by the three-storage model. It is alternatively known as permanent memory. LTM "contains information about the world, from our experiences about the language and shapes …, the cumulative experiences which we have had in life… and the automatic procedures involved in skilled behavior" (RahmatianandArmiun48). It is a system that encodes, stores, and retrieves information in which the way information is encoded affects later access to this information (May and Einstein 18-19). Unlike the previous two memory systems, LTM has almost an infinite capacity. The information is usually stored for the duration of a person's life. Abbot in 2002suggests that long-term memory "is that more permanent store in which information can reside in a dormant state – out of mind and unused – until you fetch it back into consciousness" (qtd. in Lutz andHuitt5). To sum up, the aforementioned elements are symbolically represented in the following diagram.
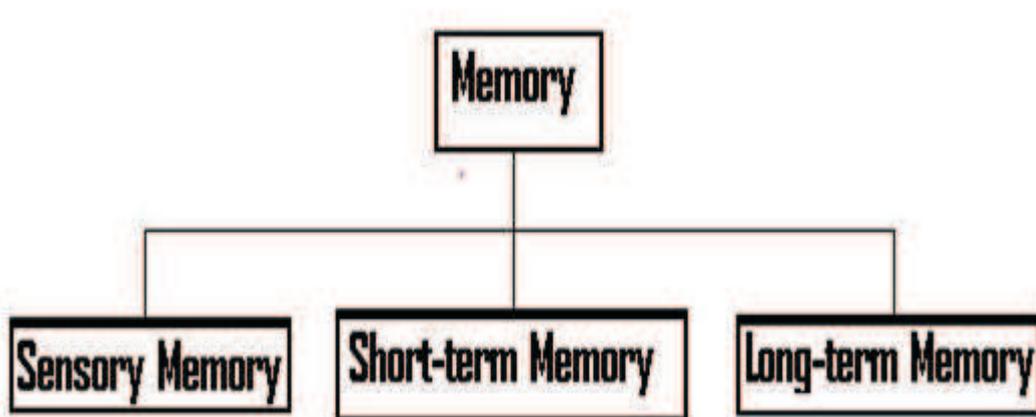
Fig.1. Representative Diagram of Memory Systems

2.2.3.1.   Types of Long Term Memory

LTM is usually further divided into two main types: explicit (or declarative) memory and implicit (or procedural) memory. It is a distinction between knowing what and knowing how.

2.2.3.1.1. Declarative Memory

Declarative memory is alternatively known as explicit memory. It is a memory that involves "knowing that" i.e. it involves factual information, general knowledge, and events. It includes all of the memories that are available in consciousness. Information, then, is consciously brought into the mind and declared (McLeod 2010). Explicit memory can be further divided into episodic memory (specific events) and semantic memory (knowledge about the world).

2.2.3.1.1.1.   Episodic Memory

Episodic memory is a long-term memory system that stores information about personal experiences and events individuals experience in lives (May and Einstein 7). It involves conscious thoughts in which individuals are influenced by time, place, context, and organization (Yu11). A best example of it would be a memory of the first day at school. A person may recall the time and place of such events as well as who was there.

2.2.3.1.1.2.   Semantic Memory

Semantic memory is a long-term memory system that stores information about general facts and knowledge (May and Einstein 7). It involves conscious thoughts in

which individuals are independent of any particular context, time or place (Yu 11). Knowing that London is the capital city of England would be a good example of this type. A person knows the information without restriction to time or place.

2.2.3.1.2. Procedural Memory

Procedural memory is alternatively known as implicit memory. It is a memory that involves "knowing how" i.e. it involves skills and experiences on how to do things. It is a memory system that influences one's current perceptions and behavior without consciousness, or intention (May & Einstein7). Knowing how to write and how to read are good examples of such type.

To sum up, Types of LTM mentioned earlier can be summarized in the following diagram:
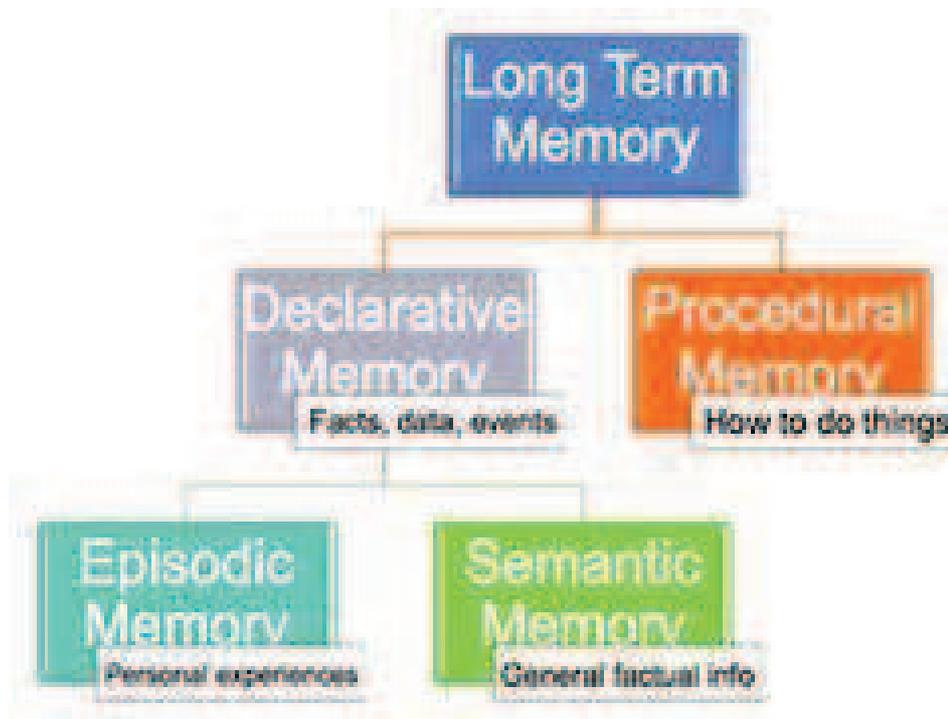
Fig.2. Representative Diagram of Types of Long Term Memory

2.3. Major Processes of Memory

Psychologists have long been interested in the study of memory. One of the most important findings is the subdivision of memory into three processes. Accordingly, the three major aspects of information processing are encoding, storage, and retrieval. The first stage which is encoding refers to the ability to absorb information from the surrounding with the help of sensory input and later change it into a form that the memory system can cope with. As a result of encoding, some information is stored. Thus, storage is the second stage. According to Heberle, "storing information is about keeping the information available so that it can be recalled at a later point". The third and final stage is retrieval, which is extracting stored information from the memory system.

2.3.1. Memory Encoding

Encoding is the first process that information passes through in order to be remembered. If information is not encoded, it will never be remembered. According to Mac Dermott and Roediger, "encoding refers to the initial experience of perceiving and learning information". Before coming to the memory system, information is first perceived form the sensory input. The latter receives different types of information, such as sounds, images and meanings. These types cannot be stored in the brain unless they are changed into a form that the system can cope with (McLeod2013). There are three main ways into which information can be coded:

2.3.1.1. Visual Encoding

Visual Encoding is defined as the process of encoding images and visual information. This means that individuals are able to encode and convert information they receive into images (Johnson). A good example to understand this type of encoding is seeing a telephone number

written on a piece of paper and remember it by the order of the numbers or by the way they are written (color, size).

2.3.1.2. Acoustic Encoding

Acoustic encoding is "the process of remembering and comprehending something that you hear" (`` Acoustic Encoding``). In other words, when receiving information that has to be remembered, the person can convert it into a sound. Later, when that person hears the same sound, the information is automatically retrieved from memory. An example of acoustic encoding is found in children when they learn the alphabet for the first time. They relate the letters into sounds, like in the famous song of the alphabet. Later, when they are asked about a letter, they try to sing the alphabet song in order to represent the sound again and thus, retrieve the letter they are looking for.

2.3.1.3. Semantic Encoding

According to Mastin, semantic encoding "is the process of encoding sensory input that has particular meaning or can be applied to a particular context, rather than deriving from a particular sense". This means that information is encoded according to a particular meaning that the person has about it. For example, a phone number this time can be encoded according to the representation of some numbers to the person concerned; like birthdays, years of special events, or the age of another person.

2.3.2. Memory Storage

Storage is the second process of getting information into the brain. This process involves the place where the information is stored, the duration that memory lasts for, and the capacity that memory has in storing information (McLeol2013).

According to many studies, information is stored in short term memory at first. Then, due the influence of some factors (such as repetition), it is transferred to long-term memory where it is kept for quite a longer time (Zimmermann 2014). Concerning the duration that memory lasts for, short term memory has a temporary storage of about (10-30 seconds), while long term memory has a longer duration that can last for a person's whole life. In addition, unlike short term memory that has a limited capacity in storing information (3-10 items), long term memory has an infinite one. This latter is what most people think of as their "memory" (http://sass.queensu.ca/learningstrategies).

2.3.3. Memory Retrieval

Retrieval is the third stage through which information is transferred to long-term memory for more permanent storage. According to May and Einstein, retrieval refers to "the process of getting information out of memory storage" (23). In other words, it is the process of getting information out from the subconscious long-term memory and making it immediately accessible to the conscious mind. This information can be events, images, or feelings stored in one's memory.

To sum up, memory involves a series of stages through which information passes. When the brain receives new information, it decodes it and then stores it. The stored information then can be retrieved. The following diagram demonstrates the three memory processes that are previously mentioned (encoding, storage, and retrieval):

Stage Analysis of Memory

Encoding → Storage → Retrieval

- Encoding
  - Storing a memory trace
  - Perception leaves representation in memory
- Storage
  - retaining trace in memory
  - latent, available for use
- Retrieval
  - recovering encoded trace from storage
  - using available knowledge in cognition/action
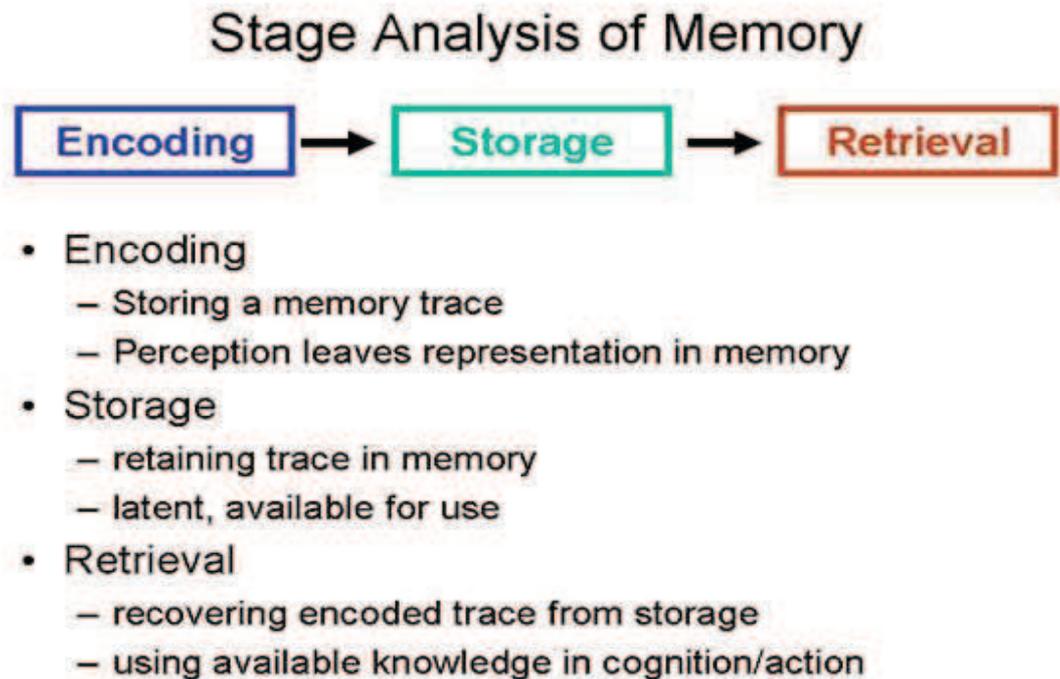
Fig.3. Representative Diagram of the Three Memory Processes

2.3.3.1. Memory Retrieval Forms

The process of retrieval involves extracting information from an unconscious level, then bringing it to into a conscious mind. There are basically four primary ways in which information is retrieved: recall, recollection, recognition, and relearning which are the fundamental forms and types of memory retrieval (Muscato).

2.3.3.1.1. Recall

Recall is the first primary way to retrieve information stored in memory. Devin in 2015 referred to recall as "the memory or perception placed in long-term storage, requiring a higher depth of processing. In other words, it is the process of retrieving information without any external cues. Individuals need a deep process in order to

get into the information stored. A good example of this type of memory retrieval is login. When people log into a site, for instance, they need to remember both username (email) and password without any cue.

2.3.3.1.2. Recollection

Recollection is the second way of retrieving information stored in memory. Muscato states that recollection "involves the piecing together of a memory". In other words, recollection is the process of retrieving a collection of memories together based on various clues. A good example of this form of memory retrieval is the attempt to remember childhood birthday parties. One attempts to remember the memory of the seventh birthday party, the eighth, and the ninth.

2.3.3.1.3. Recognition

The third type of memory retrieval is recognition. Devin in 2015 defined recognition as "memories and perceptions that do not require depth of processing". In other words, it is the process of matching a fact or concept with one already in memory using external cues. A good example of recognition is the multiple-choice tests. One is given a set of choices as cues and asked to identify the right answer. This cannot be done unless the information is already in the brain in which the individual compares the choices to the information already stored in memory. Then on the basis of this comparison, he recognizes that the choice 'X' is the right answer as it is similar to the information stored in mind.

2.3.3.1.4. Relearning

Relearning is another way of retrieving information stored in memory. It is the process of learning again what has been already stored in the long term memory, but has been decayed over time. The expression 'I used to know it' is a good example of this type. People remember information they have learnt before through learning it again (Muscato).

The following diagram demonstrates the four forms of memory retrieval.
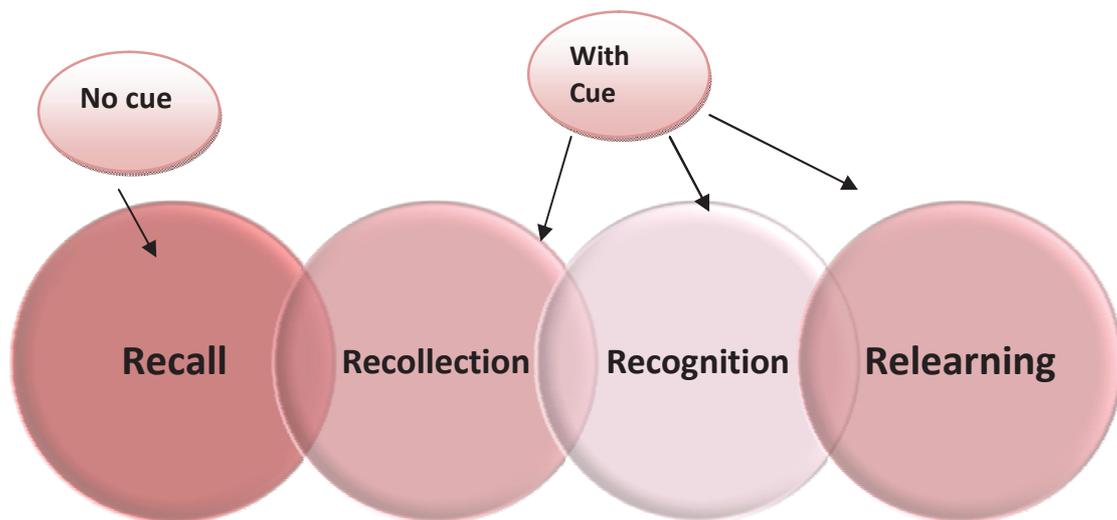
Fig.4. Representative diagram of Forms of Memory Retrieval

2.3.3.2. Types of Retrieval Cues

Retrieval is usually helped by retrieval cues that activate the knowledge stored in memory. While recall is the ability to retrieve information without cues, the other forms of retrieval require some cues. A retrieval cue then, as defined by Goldstein in 2011, is "any stimulus or words that help us remember stored memories" (qtd. in Pascucci).In other words, retrieval cues help getting information out of memory and

bring them to awareness. Successful retrieval is the ability to make association between cues present at encoding and cues present at retrieval. Psychologists usually distinguish between three types of retrieval cues: association, mood, and context.

2.3.3.2.1. Retrieval through Association

Because the brain stores information as networks of associated concepts, recalling a particular word becomes easier if another related word is first recalled. This process is alternatively called priming. A good example of priming would be association through synonyms. Recalling the word anxiety, for instance, makes it easier to recall those words which are close in meaning such as, stress, fear, etc.

2.3.3.2.2. Retrieval through Context

The context during encoding serves as a retrieval cue to a lot of information stored in the long term memory. Individuals usually remember and retrieve an event by replacing themselves in the same context they were in when such event took place. A good example of this type of retrieval cues happen for the majority of people. It happens that one leaves his car keys somewhere at home, but later forgets where exactly. This person tends to replace his steps to determine and remember where he could put the keys.

2.3.3.2.3. Retrieval through Mood

The mood faced during encoding, as well, is a retrieval cue for many pieces of information in memory. Being in the same mood in which an event took place makes it much easier to recall that event. Thus, a person's mood can influence his

ability to recall information if he is in the same mood in his attempt to recall such information. A good example of this would be a person who was anxious when passing an exam. Being anxious the next time helps to make recalling that day easier.

Retrieval through Association

Retrieval through Context

Retreival through Mood
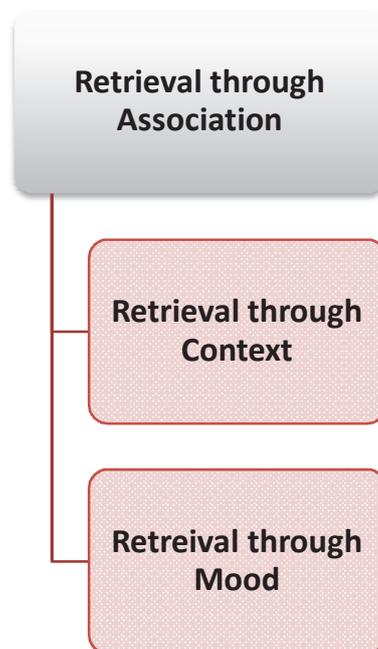
Fig.5. Representative Diagram of Retrieval Cues

Conclusion

To conclude, this section has dealt with the description of the main elements related to memory such as the three major systems of memory as well as the description of the processes involved in processing information. The theory of memory is strongly related to that of language learning. No effective learning can occur without the memorization of different elements of language. Thus, sharpening the learner's memory is a way to enhance language learning. This can be done

through finding efficient strategies and techniques that maximize the function of memory in language learning.

Section Two: Forgetting and Lexical Items

We cannot talk about memory without talking about forgetting. The failure to recall information already stored in memory is what results in forgetting. According to researches and theories set about forgetting, there are two main explanations why humans forget. First, the information looked for has disappeared from memory systems and no longer exists. In some cases, the information does not even reach the LTM; it is only encoded in STM. Second, the information looked for does exist in the memory system but for some reason, it is not reachable and cannot be retrieved (McLeod2008). The reasons that make it difficult or even impossible to retrieve information from the memory system have been the center of interest of many researchers.

2.1. Definition of Forgetting

According to psychologists, forgetting refers to the apparent loss of information already encoded and stored in LTM (Sharma). In other words, it is the inability to recall or recognize something learned earlier. Forgetting, as defined by Tulving in 1974, is "the inability to recall something now that could be recalled on an earlier occasion" (qtd. in Reodiger, Weinstein, and Agarwal2). By way of explanation, forgetting does not necessarily mean the complete loss of the information but the temporary and the failure to retrieve it back from LTM. Later, the same information that has been forgotten can be remembered successfully by the aid of some factors (cues for example). Nevertheless, in some cases, the loss of memory is permanent and the information is never remembered.

2.2. Reasons of Forgetting

Despite that forgetting is an inevitable result of memory failure, the view towards its occurrence remains negative. Thus, many researchers tried to investigate the reasons behind it. Several theories attempted to describe and explain the reasons that could lead a human to forget. These theories postulate as causes for forgetting the following: retrieval failure, the trace decay, and interference.

2.2.1. Retrieval Failure Theory

This theory suggests that one of the reasons leading to forgetting is retrieval problems. Problems of retrieval occur when trying to recall the information stored in LTM without appropriate retrieval cues. Theses cues help in the process retrieval as they direct the memory search to the appropriate part of LTM section (Sharma). Simply, this theory suggests that information exists in memory; the only problem that can lead to its forgetting is the absence of the right cue or stimulus. An example of the retrieval failure is a student who cannot develop an essay about a specific topic because he/she could not find the appropriate cue in the question that can help recall the information needed for the answer.

2.2.2. Trace Decay Theory

Trace Decay theory suggests that "when something new is learned, a memory "trace" is formed in the brain and over time the trace begins to fade and disappear, unless it is occasionally used" (http://thepeakperformancecenter.com/educationallearning/). The memory traces are responsible for memory; they are formed in the individual's neurological system. If the learned material is not used for a long time, the traces get faded with time. Thus, according to this theory, it is the lapse of time that causes forgetting (Sharma). An example of the decay theory in language learning is the applications of the known quote "use it or lose it".

It is highly recommended that learners of a foreign language keep practicing the language frequently in order not to lose it; otherwise, decay takes place.

2.2.3. Interference Theory

Interference is the tendency for new memories to impair retrieval of older memories, and the reverse. The interference theory suggests that some memories interfere with other memories. Forgetting occurs when information stored either before or after a given memory hinders the ability to remember it. In addition, memory traces are formed in the brain if the learned material remains in memory for a long time. Some overlapping traces occur when more and more memory traces are formed resulting in interference (Sharma). Based on this theory, there are two main types of interference:

2.2.3.1. Proactive Interference

In this type of interference, it is believed that prior learning inhibits recall of later learning. According to McLeod (2008), proactive interference "occurs when you cannot learn a new task because of an old task that had been learnt…Where old memories disrupt new memories". An example of proactive interference can be found with language learners who have learned French for several years before and then, they try to learn English. They may face difficulties where French vocabulary or grammar system disrupts the new one. Here, the old memories (related to French language) interfere in the recall of new memories (related to English language) resulting in the occurrence of proactive interference.

2.2.3.2. Retroactive interference

According to May and Einstein, retroactive interference takes place "when new information blocks or disrupts retrieval of older information" (23). In contrast to proactive interference,

retroactive interference takes place when later learning interferes with earlier learning. For instance, learning about motivation in psychology in the first week and learning perception in the week after may cause recalling points pertaining to perception while trying to recall information about motivation. Therefore, the more similar new information is to the previous one or the following one, the more likely interference occurs (Sharma).

2.3. Forgetting Lexical Items

The common thing that most people forget with regard to any language is its lexis or vocabulary. They encounter difficulties when there is a need to recall appropriate words and vocabulary items. Learners of a second language, for instance, find it difficult to remember new words and retrieve them when needed either in spoken or written language.

2.3.1. Definition of vocabulary

Vocabulary learning and teaching is an inseparable part of any language learning process. It is a challenge for both learners and teachers. Referring back to 1999, Miller stated that vocabulary "is a set of words that are the basic building blocks used in the generation and understanding of sentences" (qtd. in Mukoroli1). In other words, vocabulary is those words which are used to construct sentences and understand them. Thus, learners need to remember as much as possible words rather than simply learning them to be able to do so.

2.3.2. Importance of vocabulary

Vocabulary has a significant role in language learning. Wilkins says, "Without grammar very little can be conveyed….but without vocabulary nothing can be

conveyed" (qtd. in Prashant 378). The quote perfectly demonstrates the importance of vocabulary in language learning that cannot be discarded. In terms of vocabulary importance, Mukoroli states "without some knowledge of vocabulary, neither language production nor language comprehension would be possible" (8). Thus, vocabulary knowledge is one of the essential requirements for language acquisition. However, the growth of vocabulary knowledge cannot be possible unless teachers employ effective vocabulary teaching and learning strategies.

2.3.3. Dealing with Forgetting of Lexical Item

Many learners experience low vocabulary development and retrieval capacity. They focus on words in order to remember them and that is the function of the working memory. Because this latter has a limited capacity of storage, learners can retain the new learned vocabulary items at that day and usually forget them by the next lesson (Thornbury7). In addition, the majority of those learners fail to recall correct answers when tested later on resulting in errors. This demonstrates that the learned materials have not yet moved to LTM. It is, then, the role of teachers to help learners remember vocabulary for a longer period through implementing effective techniques not simply presenting it.

Therefore, research into memory suggests many techniques used to learn and teach new vocabulary items and approximately ensure their move to the LTM (Thornbury7-8).

2.3.4. Effective Techniques for Teaching Vocabulary

The teaching of vocabulary has taken many different forms according to the approach adapted in language learning. Yet, it can be innovative and personal for

teachers to add their touch in the language learning process. Among the familiar, effective techniques used to teach vocabulary are the following:

2.3.4.1. Teaching Vocabulary through Context

One of the most effective techniques of teaching vocabulary in EFL classes is through context. Teaching words in a context has been proven to be better than teaching them in isolation. Mukoroli stated that "teaching vocabulary in context is more meaningful than first teaching with wordlists" (37).Teachers should create a situation that contextualizes the new lexical items. On the basis of such context, learners can guess the meaning of unfamiliar words in an enjoyable and relaxed atmosphere (Takac 20). The context varies remarkably giving the students a good opportunity to determine the meaning of words. It can involve, for example, antonyms such as in the sentence "Although Tom loves John; he absolutely despises his twin brother Jack." The word 'despises' is clearly the opposite of 'loves'. In addition, it can involve cause and effect relationship. Learners can guess the meaning of 'quashed' easily in a sentence like, "By surrounding the protesters with armed policemen and by arresting the leader of the movement, the rebellion was effectively quashed" (``Vocabulary importance`` 2).

2.3.4.2. Teaching Vocabulary through Demonstration

Demonstration is another effective technique through which vocabulary is taught. In their attempt to explain the new lexical items, teachers tend to act and show the meaning of several words. For instance, the meaning of words such as'jump', 'smile', and 'hug' can be easily demonstrated. This technique works well with young students as it enables them to both grasp the meaning and remember the

lexical items. In addition to body movements, teachers can rely on pictures, charts, and drawing to explain and teach vocabulary items. Teaching through demonstration helps to memorize the lexical items as Zebrowska states "learners remember better the material that has been presented by means of visual aids" (qtd. in Prashant 380). The use of pictures is also of quite importance in showing the meaning of words. Pictures have several advantages as those stated by Hill in 1990 "availability, cheapness, flexibility, and variety, all of which make pictures one of the effective techniques in teaching vocabulary" (qtd. in Mansourzadeh 49).

2.4.   Teaching Vocabulary through GECM Technique

2.4.1. The Background of GECM

Through our past experiences (as Algerian pupils) as well as our current observation to the educational system adopted in Algeria for Teaching English as a Foreign Language (TEFL), it has been noticed that there is a lack regarding vocabulary teaching. Even though the Algerian educational system has adopted different methods and approaches throughout time, still there is a remarkable lack in teaching vocabulary. The majority of pupils in Algerian schools tend to neglect the importance of vocabulary in learning English. The reason is that the central element being taught is grammar. Pupils then, build attitudes that learning grammar is the key to succeed in learning English and that there is no need to master the English vocabulary. This results in the failure of learners when using the language in real life situations in which vocabulary is strongly needed. In order to eliminate the negative attitude towards learning vocabulary and most importantly facilitate the process for

both learners and teachers, a technique referred to as GECM has been proposed in this research paper.

2.4.2. Theoretical Bases of GECM

The present study predicts that GECM is a technique that can enhance vocabulary teaching and learning of English in Algeria through covering the lack existing in the current system. First of all, GECM stands for Guessing-Errors-Correction-Memory. It is a simple technique that has been developed for the sake of putting this research hypothesis into test. The hypothesis states that committing errors through guessing and having them self-corrected later enhances memorization of vocabulary items.

The starting point of GECM technique is based on the view that errors are no longer considered as obstacles and bad signs of learning. Instead, errors are good opportunities of learning. Teachers should drive learners to commit errors by encouraging them to guess. When guessing takes place, errors become an inevitable outcome. Here, learners encode information and build a hypothesis in their minds believing that it is the correct response. When receiving the input that contains the information already processed, learners wait for their hypothesis to be either confirmed or rejected. In case it is confirmed, the learner stores the answer in memory systems. If it is rejected, self-correction may take place and the learner then stores both the error and its correction. Some learners may not have the ability to self-correct, thus the teacher's interference is necessary. In both cases, the information is deeply processed. Hence, its retrieval is expected to be successful. To conclude, the process of GECM starts with guessing which leaves space for errors to occur. When errors occur, learners are generally not aware of that. It is after receiving an input that contains the correct forms of their errors that learners self-correct. These previous steps lead to a deep processing of information (in this case, lexical item) which results in enhancing its memorization.

2.4.3. Implementation of the GECM in Classrooms

In order to implement GECM effectively in classrooms, teachers should previously prepare a set of activities. The latter contains a maximum of two activities to avoid consuming much time when being solved in classroom. The activities have to be in correspondence with the content of the lesson they belong to. Otherwise, the students will not be able to recognize their errors and, thus, self-correct. In teaching, a lesson may take more than one session. Then, the set of activities is better to be given at the first session of the lesson. In the other sessions, vocabulary items remain nearly the same; so, there is no need for introducing a new set of activities in each one. Teachers keep dealing with the same vocabulary items in order to teach the different skills.

At the beginning of the lesson (warm-up), the teacher distributes the set of activities previously prepared. The students are given a duration of 5-10 minutes to solve them. During which, the teacher drives the pupils towards guessing through encouragement. It is necessary to point that using two different colors, one for answering and another for correcting errors is an important condition that enhances the results of this technique. Through guessing, students are inevitably going to commit errors since the majority of the lexical items given in the activities are new for them. Committing errors is the second step that students pass through in the suggested technique. The third step is correction; here, the teacher asks students to put aside the set of activities they have already answered and insists that they have to correct (using the other colour) whenever they recognize an error from the input going to be supplied. While the teacher introduces and explains the new input, students self correct. In some cases, the teacher may notice that some students do not succeed to self-correct, thus, his/her interference is necessary. A quick group correction can be carried out to ensure that all right answers are supplied.

When students are given a set of activities that contains some lexical items they have never encountered, they generally hesitate and flee the answer. In GECM technique, the case is different. Even though the lexical items are new, students are encouraged to guess and commit errors. When they are exposed to an input in which the same lexical items are explained, the recognition of their errors may occur and, thus, self-correction takes place. The outcome of the three major processes of GECM (guessing, errors, and then correction) would probably be a better memorization of those lexical items.

CONCLUSION

When learning new vocabulary items, the main obstacle that students face is forgetting. Many techniques were developed in order to make students memorize new vocabulary items better. Thus, the study of memory and forgetting can be associated with developing effective techniques of teaching vocabulary in language learning. The concern of this chapter is to reveal the relation that exists between the field of psychology (memory and forgetting) and the field of language teaching (vocabulary teaching techniques) and the suggestion of a new technique (GECM) aiming to improve the memorization of lexical items.
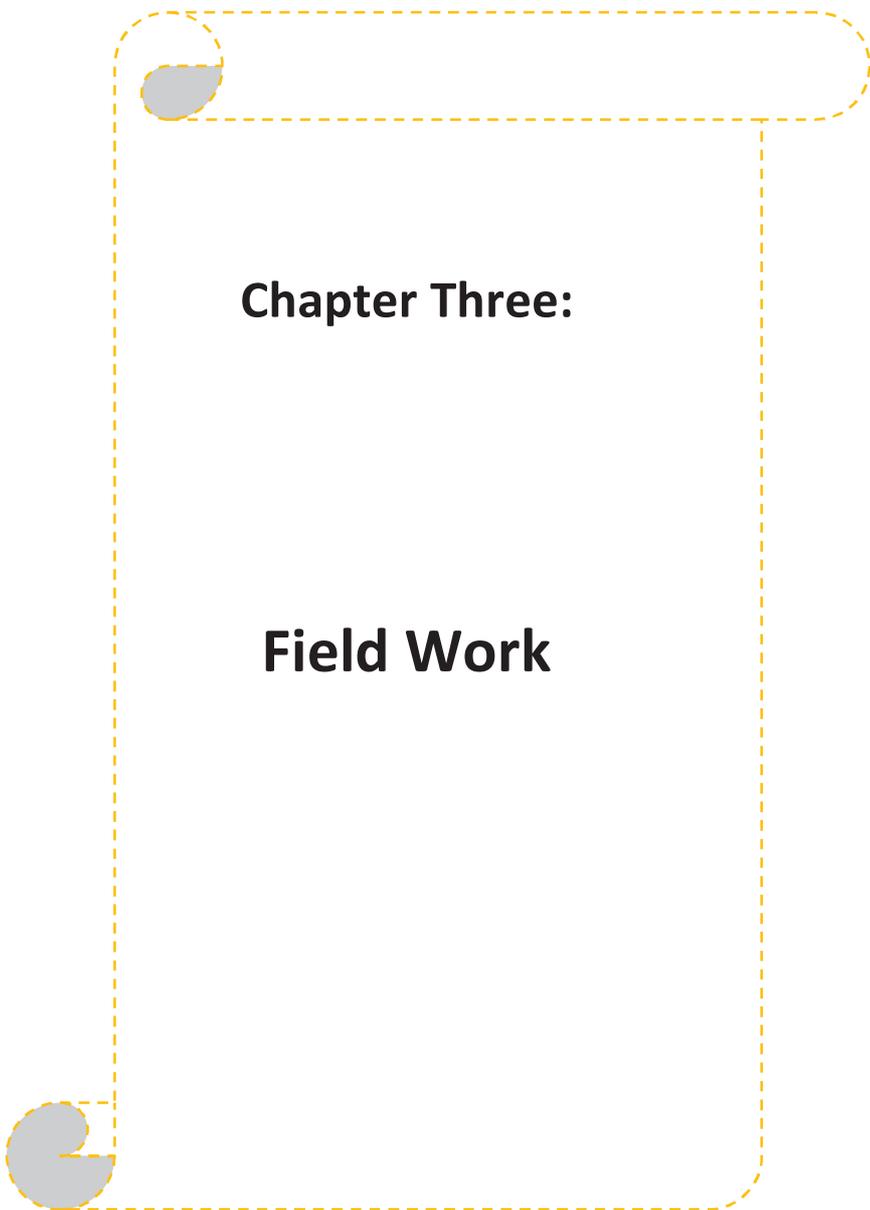
Chapter Three:

Field Work

Chapter Three: Fieldwork

Introduction

Chapter 3, fieldwork, is devoted to the practical part of the study, within which the impact of self-correcting lexical items on increasing memorizationis considered for clarification. In order to answe1r the research questions, the present paper develops a technique referred to as "GECM" and testsit on a class of third year middle school pupils. This class is technically considered"the experimental group", while another class of the same level, taught normally, stands as «the control group". After a month and a half of applying the considered technique, a test has been administered to compare the achievements of both groups and measure the extent of the increase of memorization GECMhas yielded.

This chapterpresents and analyses the data obtained through the implementation of GECM and the results produced by both groups in the test assessing the resulting value of the considered technique.

3.1. Observations

In this section, a comparative description of the teaching process for both groups is established. Five lessons have been adapted to expose such comparison for a period of one month and a half.

3.1.1. Observations of the Control Group

3.1.1.1.   Lesson One

The first lesson was introduced on 6 March 2017. It was entitled "Listen and speak". The objective of this lesson was to describe one's daily activities. In order to achieve such anobjective, the teacher first recycled the previously learnt input, simple present, and later introduced the new language form namely the use of the simple present with adverbs of frequency

The teacher should accomplish four steps to attain the general objective. Each step had a sub-objective. The first step, the warm-upwould be taking 5 to 10 minutes, the aim of which was to distinguish between week-days and week-ends and prepare the pupils to the lesson. The teacher asked the pupils to orally name the days of the week then, to say on which days they go to school and on which ones they would be free. For instance, "On Sunday, I get up early". `On Friday, I get up late". In the next step, the pre-listening stage, the teacher tried to involve the pupils in the concerned topic and motivate them for the following step. This step tookabout ten minutes with the purpose of interacting with pupils and asking them about their preferred activities on a typical day. The pupils reacted with different answers e.g., pupil one: "I play judo on Tuesday's afternoon." pupil two: "My father always goes to the mosque."Inthe third step, that is listening, the teacher read the script from the text book on page 167, and asked pupils to listen carefully to try to answer some general question likefor example, "Who is Souad?".The pupils said: "Souad is a middle school pupil". The aim of this step was to

check pupils' listening comprehension. After that, the teacher wrote some sentences on the board taken from the text (A-F),then, reread the text and asked the pupils to write the right adverbs of frequency beside each sentence. To illustrate, the pupils wrote the adverb of frequency "always" next to the sentence "Souad's day starts at 6.30 am". In the last step of the lesson, post-listening, the teacher askedthe pupils to order the adverbs of frequency from most to least frequent. Based on the script about Souad's typical day, the teacher had the pupils to get the meaning of the adverbs of frequency.

3.1.1.2. Lesson Two

The second lesson was introduced on 13 March 2017. It was entitled "say it clear". The purpose of this lesson was that learners would be able to talk about actions starting in the past but their effects continuing in the present. In order to achieve such an objective, the teacher introduced the present perfect tense with already, just, and yet. During the presentation of the lesson, many new lexical items had been encountered (reporter, fans, musical band...).

The teacher went through five steps to achieve the general objective of the lesson. The first step, brainstorming,whose aim was to prepare the pupils to the lesson,took approximately 5 minutes. The teacher asked the pupils about their favorite stars such as actors, players, or singers. There was a kind of interaction between the teacher and the pupils such as in the following extract: who is your favorite player? The pupil answered"Zidane". The teacher asked: "Do you love him?" and the pupil answered in return: "Yes, I do." The teacher then said: "So, you are a fan of him". Later, she explained the word 'fan' to her pupils. In the second step, the teacher showed her pupils a picture taken from a magazine and asked: "Do you know 'one direction'?" The teacher asked those who answered with "yes", "What is it?" When they said: "It is a group of singers and dancers"; the teacher reinforced the answer and said:"the group sings, dances, and plays musical instruments; we call them a' musical

band'.The third step was called 'While Listening', it took approximately ten minutes. In this step, the teacher introduced a situation in order to test the listening comprehension of the pupils. She read the passage (page 103) about the arrival of 'one direction group' at the airport. After reading the passage, the teacher asked some related questions. Examples of the questions were"Who is speaking?"to which the pupils answered: "The reporter 'Henry Gates'", "where is he? Why?" The pupils answered as"He is at the airport. He is waiting for 'one direction'. "Who else is waiting for them?" the teacherasked. The pupils replied:"Their fans". Later, in the fourth step, the teacher reread the passage an asked the pupils to complete the sentences with the correct verb in the past participle (shouted, thrown, welcomed, arrived, landed, and gathered). For example, the sentence `the band has just …at the airport` and `a large crowd of fans have already …".Finally, the teacher recycled the learnt materials in a duration of about ten minutes. She asked her pupils to read aloud the passage in order to check and make sure their pronunciation of the final 'ed' is correct. For instance, ed in shouted is pronounced /id/, the teacher then said after the sound /t/ and /d/, "ed" is pronounced /id/.

3.1.1.3.   Lesson Three

The third lesson was introduced on 6 April 2017. It was entitled "what has happened?" The purpose of this lesson was that learners would be able to talk about actions starting in the past and continuing in the present. In order to achieve that objective, the teacher first recycled the previously learnt material in lesson two, and then introduced the present perfect tense with time adverbials "since" and "for".

The teacher completed four steps to achieve the general objective of the lesson. The first step was a review of the previous lesson; it took approximately 10 minutes,the aim of which was to prepare the pupils to the lesson. The teacher wrote some sentences on the board and

asked the pupils to read correctly the auxiliary "to have", that has two forms; weak and strong. For instance, "He has returned to Algeria", "Have you met Yacine?"as stated by the teacher, "In both of the sentences (at the beginning and in the middle of the statement), the auxiliary 'to have' takes a weak form". In the two remaining sentences (he has not changed a lot, yes, I have.), the teacher stated "the auxiliary 'to have' takes a strong form when it is negated and at the end of a sentence."

After reviewing the previous lesson, the teacher went through a series of steps called the PPP. The first P stands for presentation, it took approximately fifteen minutes. The teacher presented a video (using a data show) where a native speaker explained the lesson. The pupils listened to the explanation about the use of 'since" and 'for' with the present perfect tense. After the end of the video, the teacher asked the pupils about the date and the periodof timethey spent in their current school as in the following extract: T: "When did you come to this school?" The pupils answered «In 2014/2013". The teacher asked in return: "For how many years have you studied here?" Pupils replied "Three years", some said "Four years". The teacher explained the important points mentioned in the video. She pointed that it was better to use 'since' and answer as "We have studied in this school since 2014" for a starting, point in time that continues in the present (2017). While it was better to use 'for' to refer to a period of time that starts in the past (2014) and continues in the present (2017) to say: "We have been here for three years". The second P stands for practice. She gave them an activity to answer in about ten minutes, where they were asked to put 'since' or 'for' in the right place. For instance, "He has not seen his parents … two months, she has not played tennis …she broke her leg.

Finally, the pupils were asked to copy the grammar window which contained the rules of the lesson. After that, the teacher asked her pupils to imagine a situation in which they use 'since'

and 'for'. Here, pupils were supposed to produce something because of what has been presented. "To produce" is what the fourth P stands for.

3.1.1.4. Lesson Four

The fourth lesson was introduced on 17 April 2017. It was entitled "Listen and Speak". The purpose of this lesson was that learners would be able to get some vocabulary related to holidays (cruise, safari, camping, trekking…). During the presentation of the lesson, the teacher recycled the previously learnt material that was the past simple.

The teacher accomplished four steps to achieve the general objective of the lesson. The first step was a warm up, the aim of which was to prepare the pupils to the lesson and took approximately 10 minutes. There was a kind of interaction where the teacher asked her pupils some questions such as, "Where do you often go on holidays?", "What do you do when you are on holidays?". The pupils gave different answers such as, "I go to the beach", "I go to the countryside", and "when I am on holidays, I do shopping". In the second step of the lesson (pre-listening), the teacher pinned some pictures on the board and wrote some statements below such as, 'You travel on a ship and visit different countries'→ cruise, 'You sleep in a tent and cook your own food'→ camping. Then, she asked the pupils to find out which statement matches a particular picture. This step took approximately fifteen minutes.

In the following step (while listening), the teacher checked her pupils' listening comprehension for about ten minutes. First, she read a passage from the textbook on page 68 and asked her pupils to listen carefully, and later answer some questions. For example, questions such as 'who are the people?' For which the pupils answered: "They are friends". In addition, "where are they?"for which the pupils answered:"they are on safari in Kenya." After answering the questions, the teacher moved to the following and the last step. It was called the post-listening stage; it took approximately twenty minutes. In this step, the teacher recycled

the simple past through the same passage. In that passage, Ben has mentioned the activities he did with his friends in Kenya when they were on the safari. The teacher then asked the pupils to write those activities down. Examples of the activities were, 'First, they arrived at the airport and went by bus to campsite', 'they saw some giraffes by the side of the road.', 'they tested the local food in the villages'. After giving the activities, the pupils were asked to underline the verbs and give their base form. The teacher then reminded her pupils stating "these verbs are in the past simple; they express a finished action. Some of them are regular; they are formed by adding 'ed' to the base form (such as, arrived, visited…) while others are irregular; they change completely (such as went, spent…)."

3.1.1.5. Lesson Five

The fifth lesson was introduced on April23, 2017. It was entitled "Listen and Speak". The purpose of this lesson was that learners would be able to describe a country and its different features. During the presentation of the lesson, many lexical items have been encountered such as (continent, river, waterfall, climate…).

The teacher passed through four steps to achieve the general objective of the lesson. The first step was a brainstorming. The aim of which was to prepare the pupils to the lesson. It took approximately 10 minutes. There was a kind of interaction between the teacher and the pupils. After showing the pupils a map of the world, the teacher pointed some parts of the map and let them interact freely. The teacher pointed the continents and asked her pupils "what are they? Name them". The pupils answered: "America, Africa, and Asia…" Then, she pointed at the blue parts of the map and asked:"What are these?", and asked them to give some examples. They gave different answers such as, (the Indian Ocean, the Mediterranean Sea…).

In the second step, the teacher set two activities in order to introduce new vocabulary and to involve the pupils in the topic. In the first activity, she gave them a table of two columns. The first column presented the category of words (continent, country, ocean, sea, desert, mountain, capital city, island, river) while the second column presented the words that the pupils were supposed to put in their right category (Africa, England, the pacific, the Mediterranean sea, the Sahara, the Alps, Paris, Sicily, the Nile). In the second activity, the pupils were supposed to match a set of countries (Canada, Australia, Egypt, New Zeeland…) with the continent they belong to (Europe, Asia, Africa…). After solving the two activities, the teacher moved to another step in the lesson. This step took approximately twenty minutes. The teacher read the script from the course book on page 169 after telling the pupils to listen carefully and fill in the table with the proper information. The table included a kind of description of Algeria in which pupils were asked to fill in the columns of (borders, area, population, density, regions of the country, capital city, and climate) with the appropriate pieces of information from the passage they listened to. After correcting the task collectively, the teacher moved to the last step in the lesson that was post-listening. This step took approximately ten minutes in which the pupils were asked to write correct sentences describing Algeria. Using information from the text given, pupils produced sentences like: 'Algeria is a big country in North Africa' or 'It has got borders with Libya and Tunisia from the east.'

Based on our observation of the lessons presented with the control group, we have noticed that the teacher introduces the lexical items in situations. In other words, most of the time, vocabulary is taught inductively where the majority of pupils are not aware of the process. Regarding error occurrence, errors are consideredas a sign of failure and their correction is immediate when possible. Another significant observation is that classroom activities are mainly those of grammar where vocabulary items are inductively included.

3.1.2. Observations of the Experimental Group

3.1.2.1. Experimental Group Lessons

3.1.2.1.1. Lesson One

The first lesson with the experimental group was introduced on 6 March 2017. The lesson was entitled "Listen and Speak". The purpose of this lesson was to describe one's daily activities with the use of adverbs of frequency. In order to achieve such an objective, the teacher had to pass some major steps. With this group (experimental), the teacher used the GECM technique, which made a slight difference in the steps compared with the control group.

In the first step, which represented the first and second elements of the GECM technique (Guessing and Erring), the teacher distributed a set of activities (see Figs.6 and 7) designed for this lesson to each pupil. The pupils were asked to guess the answers by filling all the blanks; it took 5-10 minutes. The set of activities contained series of vocabulary items related to the lesson, namely daily routine activities and adverbs of frequency. The aim of this step was to drive pupils towards committing errors by asking them to guess the answers. In the second step, called "Listening Comprehension", the teachers read a text about one's typical day from the text book on page 167. The teacher asked her pupils to correct their mistakes in the previous activities if they could recognize them. The pupils listened to the teacher and some of them recognized and corrected their errors. In the third step, the teacher presented a group activity where pupilswere asked to order orally adverbs of frequency from most frequent to least frequent. Here,the pupilswere also asked to correct their errors in the set of activities. The aim of these two steps was to introduce the new language and, most importantly, to give the chance for the pupils to self-correct themselves. In the last step,

entitled "Producing", the teacher wrote sentences from the script on the board; the pupils were asked to insert the right frequency adverb in the sentences. An example from this activity can be: "Souad gets up at 7:00 am → …" The pupils were expected to provide "often" as an answer for this sentence. The aim of this last step was to check students' comprehension and to reproduce the new language.

3.1.2.1.2. Lesson Two

The second lesson with the experimental group was introduced on 13 March 2017. The main objective of this lesson was that pupils would be able to describe activities starting in the past and goingon in the present. The language form that the teacher aimed to deliver in this lesson was the present perfect with "already", "just", and "yet". The vocabulary items included in this lesson were related to a musical band "One Direction" that the teacher introduced during the lesson (fans, airport, reporter, bouquet … etc.). Different steps were went through during this second lesson.

Just like in the first lesson, the first step always represents "Guessing and Errors" from the GECM technique. Therefore, a set of activities was designed for this lesson (see Fig.8) and distributed to each pupil. The lexical items given in the activities were related to the vocabulary elements of the lesson. The second step was listening comprehension where the teacher read a passage about the arrival of "One direction" to America (airport). The pupils listened to the teacher reading and explaining the lexical items. At the same time, the pupils corrected their mistakes (self-correction). The elements of the two activities given in the set were vocabulary items related to the arrival of the band as well as a group of verbs in the past participle. The fourth and the last step in the lesson was a recycling step called "Say it clear". The pupils read aloud and classified the verbs according to the pronunciation of their final "ed". Some examples can be:

The plane has just landed. → /id/

A large crowd of fans already gather<u>ed</u>. → /d/

They have just stepp<u>ed</u> out the plane. → /t/

3.1.2.1.3. Lesson Three

The third lesson with the experimental group was introduced on 6[th]April 2017. The main objective of this lesson was that pupils would be able to talk about actions that would start in the past continue in the present. The language form that the teacher aimed to deliver in this lesson was the use of the present perfect with "since" and "for". The vocabulary items included in this lesson were related to a video the teacher played during the lesson (domestic animal, wild animal, wig, hair extensions, Pet). Different steps were passed through during this third lesson.

In the first step, like in the other previous lessons, a set of activities was distributed to each pupil. The set of this third lesson contained mainly one activity (see Fig.9). The pupils were asked to match definitions with their appropriate words. They were expected to guess the right answer and therefore to commit errors. In the second step which was "interaction", the pupils were exposed to a video (using a data-show) where a native teacher explained the grammar rules of using "since" and "for" with the present perfect. The video also contained all the vocabulary items already given in the activity and the pupils corrected their errors when recognized (self-correction). In the third step, pupilswere given an activity where they completed sentences by using "since" or "for". The aim of this step was to let pupils distinguish between a starting point of time (since) and a period (for). In the next step, called "interpreting", pupils copied the grammar window written by the teacher on the board. The last step which was always a recycling one, a grammar activity about the use of "since" and "for" was given for the pupils to do.

3.1.2.1.4. Lesson Four

The fourth lesson with the experimental group was introduced on 13 April 2017. The lesson was entitled "Listen and Speak"; its main objective was that pupils would be able to talk about holidays with the use of past simple. The tense was already introduced in previous lessons; the teacher only recycled its use. The vocabulary items included in this lesson were words related to holidays such as cruise, safari, sightseeing, camping … etc.

In the first step of the lesson, the fourth set of activities of this study was distributed to each pupil (see Fig.10). Just like in the previous lessons, the pupils were asked to guess the answers of the activity. The fourth set contained only one activity for which the pupils were asked to match the type of holiday with its picture. The activity contained seven types of holidays (Cruise, safari, sightseeing, camping, beach holiday, cycling, and horse riding). In the second step, the teacher gave definitions and clarifications about the same type of holidays given in the previous activity. The pupils answered orally and at the same time corrected their mistakes if recognized. An example of the definitions can be "You travel on a ship (a big boat) and visit different countries. → cruise". In the third step of this lesson, the teacher read a script from Essential English book 3, page 67. The script was about a group of friends who had a safari in Kenya. The pupils were then asked to answer some general comprehension questions. In the fourth lesson, named "Producing", the pupils listened to specific information and listed the activities the friends had in the safari. This step introduced some verbs related to holidays to the students. In the last step of this lesson, the teacher gave her pupils an activity where they were asked to underline verbs from sentences and give their infinitives. The aim of this step was to recycle "regular and irregular verbs".

3.1.2.1.5. Lesson Five

The fifth, and the last lesson in this study, was introduced on 23 April 2017. The main objective of this lesson was that pupils would be able to describe countries and places. A sub-objective was that pupils would be able to use comparative adjectives to describe. The vocabulary items included in this lesson were related to the main objective (continents, countries, capitals, population, oceans, rivers, lakes … etc.).

In the first step of the lesson, a set of activities was distributed to each pupil. This step, as in any other lesson, represents the two first elements of the GECM technique (Guessing and Errors). The fourth set of activities (see Figs**.**11 and 12) contained two activities where pupils were asked to guess the answers. In the first activity, pupils were asked to join the vocabulary items with their corresponding pictures. The vocabulary items given in this activity were the same planned by the teacher (related to the objective). In the second activity, a world map was given and the pupils were asked to match the countries with the continents they belong to. Some of the countries given in this activity were Algeria, Canada, Australia, Russia, and America … etc. In the third step of the lesson, the pupils listened to a script in which Algeria was described. The teacher then explained the script and the pupils had the chance to recognize and correct their mistakes. In the last step, the teacher gave an activity to her pupils where they had to complete a table with the correct information about Algeria (location, borders, population, features and climate). After that, the teacher did a quick and oral correction of the second activity of the set, where the pupils had the chance to correct their errors.

3.1.2.2. Experimental Group Set of Activities

In order to realize the first elements of the GECM technique, which are (Guessing, Errors, and Self-correction), five sets of activities were designed during this study. The set of activities represent the target vocabulary items included in each of the five lessons presented with the experimental group. The sets were introduced at the beginning of each lesson, knowing that a lesson may take several sessions. The selection of vocabulary items included in the set in each lesson was restricted to the curriculum. Since the study was carried out at the middle school level, modification in the topics or vocabulary items was not possible. This explains the selection of the lexical items targeted in the activities.

3.1.2.2.1. Set One

The first set of activities was designed in accordance with the elements of the first lesson. The lesson's main objective is to describe one's daily and frequent activity, thus the lexical items included some daily routine activities such as 'get up','leave home', 'start classes' …etc. The pupilswere asked to write the appropriate activity under its picture. Besides, a second activity included adverbs of frequency as vocabulary items not grammar in which the pupilswere asked to reorder the adverbs from the least frequent to the most frequent.

Activity One

Write the appropriate daily activity under each picture:

Get up – go to bed – leave home – have lunch – have breakfast – have dinner – start classes – finish classes – sleep – revise – watch TV.

1- ....

2- ....

3- ....

4- ....

5- ....

6- ....

7- ....

8- ....

9- ....

10- ....

11- ....

Fig.6 Set one 1/2

Activity Two:

Reorder the following adverbs of frequency from least to most frequent:

> Always – hardly ever – often – never – generally – sometimes
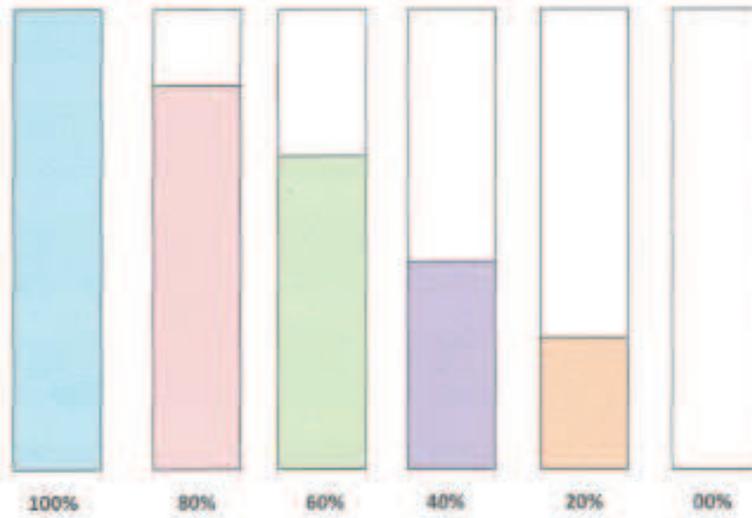
Fig.7. Set One 2/2

<div align="center">

3.1.2.2.2. Set Two

</div>

The second set of activities was designedwith respect to the elements of the second lesson. In the second step of this lesson, the teacher prepared a script to read for her pupils. The script described the arrival of a famous musical band to the airport. Thus, the first activity in this set included some lexical items mentioned in the script. In addition, the lesson's main objective was to describe activities starting in the past and continuing in the present. Thus, the second activity in the set was related to the meaning of some verbs (also mentioned in the script) in their past participle forms.

Fig.8. Set two 1/1

3.1.2.2.3. Set Three

The third set of activities included only one activity because the lesson did not include many vocabulary items and was more likely a grammar lesson. In the third lesson, the pupils were exposed to a video in which a native teacher explained their grammar rule (the use of "since" and "for" with the P.P.). The activity given to the pupils included some lexical items mentioned in the video and later explained by the teacher. The pupils were simply asked to write the items under their definitions.

Activity One :

Put each of the following words under its corresponding definition:

A pet – a wig – a domestic animal – hair extensions – a wild animal

An artificial hair that you wear on your head.

1-..

An animal that lives at home or in a natural environment but, it is not dangerous.

2-..

A dangerous animal that lives in a natural environment.

3-..

An animal that you can keep at home as a companion.

4-..

Lengths of artificial hair that you can attach to your hair.

5-..

Fig.9. Set Three 1/1

3.1.2.2.4. Set Four

The fourth set of activities also included one activity with 7 lexical items. The general aim of the fourth lesson was to talk about holidays and use words related to it. During the lesson, the teacher read a script from the school textbook, which talked about a group of friends who had a safari in Kenya. Therefore, the activity was designed to serve these elements of the lesson in order to allow self-correction. The pupils were asked to match the type of holidays (safari-activity holiday- sightseeing- cruise…etc.) with their pictures.

Fig.10. Set Four 1/1

3.1.2.2.5. Set Five

The fifth set of activities is the last one. It was designed in accordance with the elements of the fifth lesson. The main objective of the lesson was to be able to describe countries, places, and to compare. The set included two activities. In the first activity, the pupils were asked to put each word under its corresponding picture. Some of the words were river, capital city, country, borders … etc. In the second activity, the pupils were given a world map and were asked to write the names of some countries (Algeria – Australia – Brazil – Canada … etc.) where they belong on the map.

Fig.11 .Set Five 1/2

Activity Two: Put the names of these countries where they belong on the map:

Algeria - Australia – Canada – Russia – Brazil - France

1-.....................
2-.....................
3-.....................
4-.....................
5-.....................
6-.....................

2/2
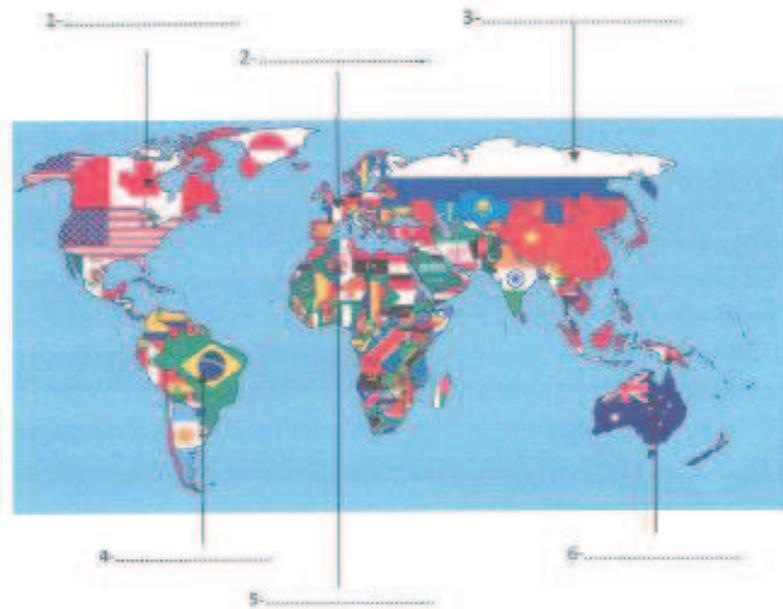
Fig.12. Set Five 2/2

3.2.   Analysis and Interpretation of the Results

3.2.1. Results of Sets of Activities

After collecting and analyzingthe five set of activities applied with the experimental group, specific data was obtained. The latter reflects how pupils reacted and how they performed with regard to the first three elements of the GECM technique (Guessing, Errors, and Correction). In order to detect pupils' guessing and errors, correct and incorrect answers were counted. In addition, corrected and uncorrected answers were counted to check pupils' self-correction. The numbers obtained in tablesare transformed into percentages and interpreted in the following graphs.

3.2.1.1.   Percentage of Correct Answers

Sets	Items/ each set	Total Answers	Correct Answers	Percentage
Set 01	17	408	285	69,85%
Set 02	15	360	151	41,94%
Set 03	05	120	70	58,33%
Set 04	07	168	98	58,33%
Set 05	14	336	200	59,52%

Table1Percentage of Correct Answers
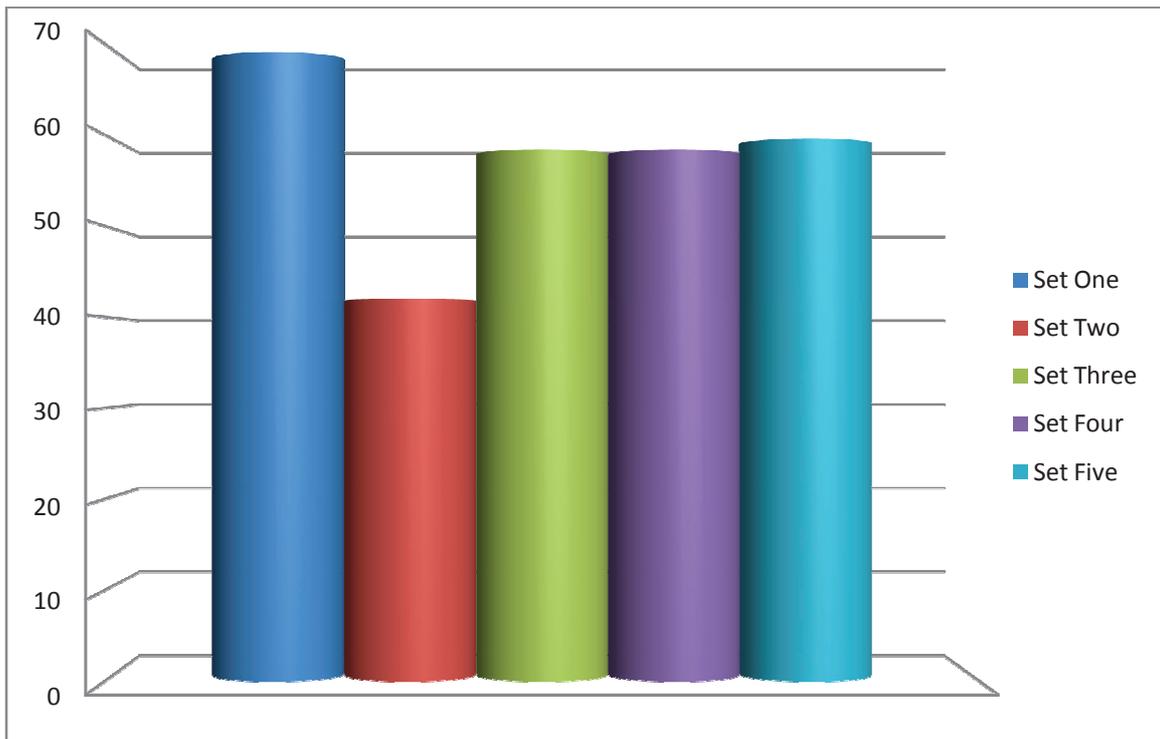
Fig.13 Percentage of Correct Answers

The first graph represents the percentage of pupils' correct answers in all the five set of activities. Percentages differ from one set to another and this difference can be attributedto various factors.

The percentage of correct answers reaches 69%inthe firstset, during which the pupils were encouraged by the teacher to guess answers (as the technique requires). Yet, the pupils seemed uncomfortable towards submitting answers they doubt. Therefore, the majority depended on their peers to check the correct answers as far as noticed. This may explain the high percentage of correct answers in the first set of activities.

In the second set of activities, the percentage of correct answers is approximately 42%. The percentage decreases in comparison with the first set of activities. This decrease can be attributed to the teacher's attempt to re-encourage her pupils to commiterrors and answer honestly without relying on each other's answers.

In the third set, the percentage increases compared to the second one, reaching approximately 58%. This might be because of the easiness and the familiarity of the lexical items of the activity given in the set. In addition, the activity contains five lexical items unlike the previous sets that contain more than ten items.

In the fourth set of activities, the percentage of correct answers is the same as the third one (58.33). In this set,the pupils were asked to match types of holidays with their pictures. The percentage obtained can be explained by the familiarity of the lexical items to the pupils. The activity contained some words like "cruise", "sightseeing", "activity holiday" that may seem familiar to pupils.

In the fifth set of activities, the percentage of correct answers is the highest among all the other percentages where it reaches 59.52%. This can also be explained by the familiarity of most of the lexical items included in the fifth set. The items were related to countries and their description, which is an element that the pupils have dealt with duringthe previous years.

3.2.1.2.   Percentage of Incorrect Answers

Sets	Items/ each set	Total Answers	Incorrect Answers	Percentage
Set 01	17	408	123	30.14%
Set 02	15	360	209	58.05%
Set 03	05	120	50	41.66%
Set 04	07	168	70	41.66%
Set 05	14	336	136	40.47%

Table2Percentage of Incorrect Answers
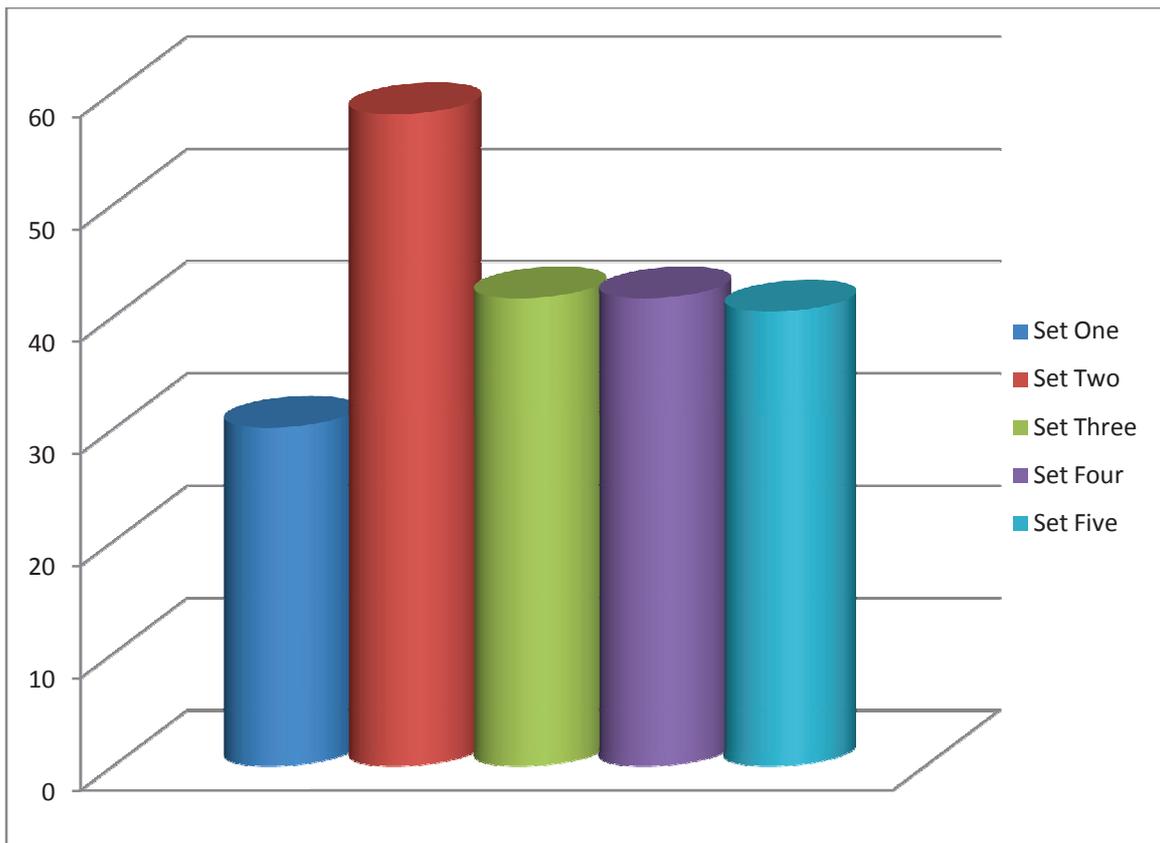
Fig.14 Percentage of Incorrect Answers

The percentage of incorrect answers can be explained in relation with the percentage of correct answers. In the first set, the percentage of incorrect answers reaches 30.14% thatcan be explainedby the pupil's reaction towards submitting wrong utterances. Most of them tried to answer by depending on their peers, which may have resulted in a low percentage as demonstrated in Fig.14.In the second set of activities, the percentage of incorrect answers increases and is considered the highest (58.05%). The reason behind this increase is, as previously explained, the teacher's reinforcement in favor of her pupils. In the third and the fourth sets, the percentage of incorrect answers decreases to 41.66% in both, if compared to the second set (see table 2).But, they are still considered of a high percentage when compared to the first set. The reasons behind the increase might be related to the difficulty or the unfamiliarity of some lexical items to pupils. In the last set of activities, the percentage of

incorrect answers slightly decreases to 40.47%. As previously explained in correct answers, most of the lexical items included in this last set are familiar to pupils, which may explain the obtainment of such a percentage.

3.2.1.3. Percentage of Corrected Answers

Sets	Items/ each set	Total of Wrong Answers	Corrected Answers	Percentage
Set 01	17	123	105	85,36%
Set 02	15	209	105	29,16%
Set 03	05	50	39	78%
Set 04	07	70	60	85,71%
Set 05	14	136	50	36,76%

Table 3 Percentage of Corrected Answers
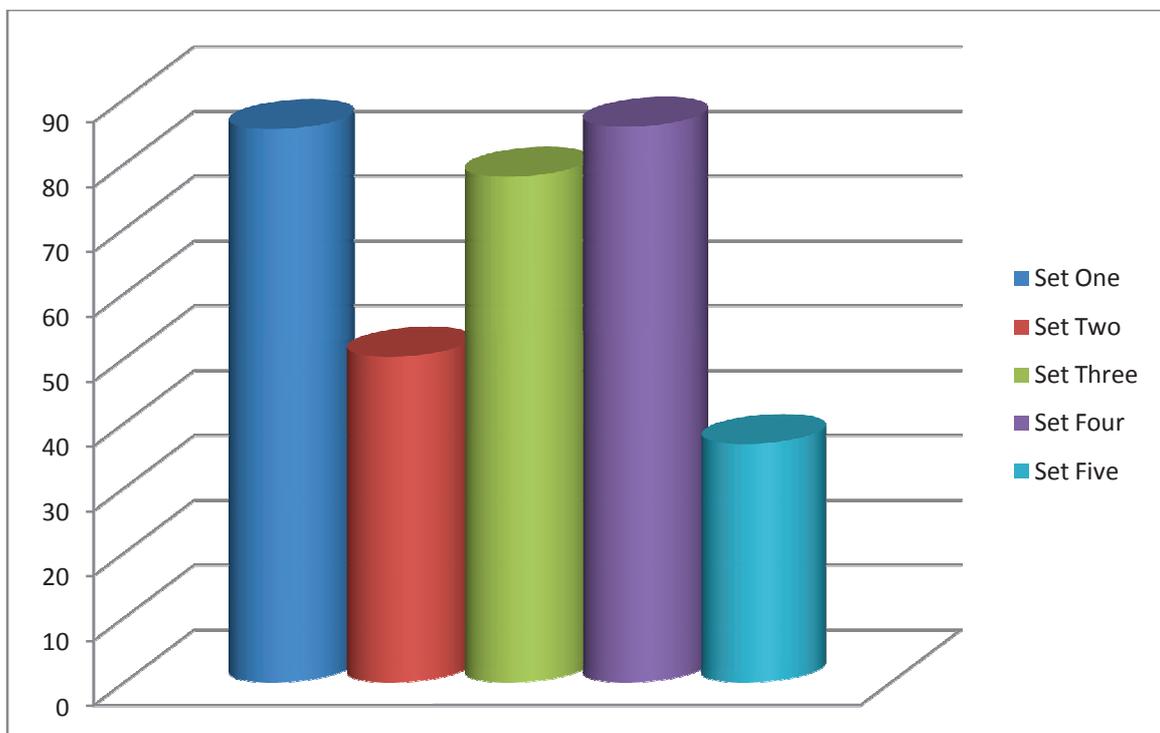
Fig.15 Percentage of Corrected Answers

Figure number fifteen (Fig.15) represents the percentage of corrected answers. The graph reflects two significant facts in which the percentage starts increasing and then decreases in the last set. First, in the first set of activities, the percentage of corrected answersis high (85, 36%)which can be explained with the teacher's explanations and reinforcement on her students to self-correct. Yet, this percentage decreases to reach 50% in the second set; this can be referred to the possibility that pupils may have forgotten that they have to self-correct their errors. After noticing this decrease, the teacher explained to her pupils the importance of self-correction and the result is reflected in the third and the fourth set of activities where the percentage increases to78% and then reaches 85,71%. The increase clearlydemonstrates that the pupils understood that they have to correct themselves. This is also tied with the teacher's reinforcement in each lesson and her attempt to encourage and remind her pupils of self-correction. Second, the percentage of corrected answers remarkably decreases in the fifth set of activities to become the lowest of all the five sets with 36,76%. This unexpected decrease can be related to the fact that the script used in lesson five did not contain all the correspondent lexical items handled in the set. Thus, the pupils did not have the chance to recognize and correct the errors they have committed. In addition, the teacher has alsoattributed this decrease to the pupils' carelessness, noticed at the end of the school year.

3.2.1.4. Percentage of Uncorrected Answers

Sets	Items/ each set	Total of wrong Answers	Uncorrected Answers	Percentage
Set 01	17	123	18	04.41%
Set 02	15	209	104	28.88%
Set 03	05	50	11	9.16%
Set 04	07	70	10	5.95%
Set 05	14	136	86	25,19%

Table4 Percentage of Uncorrected Answers
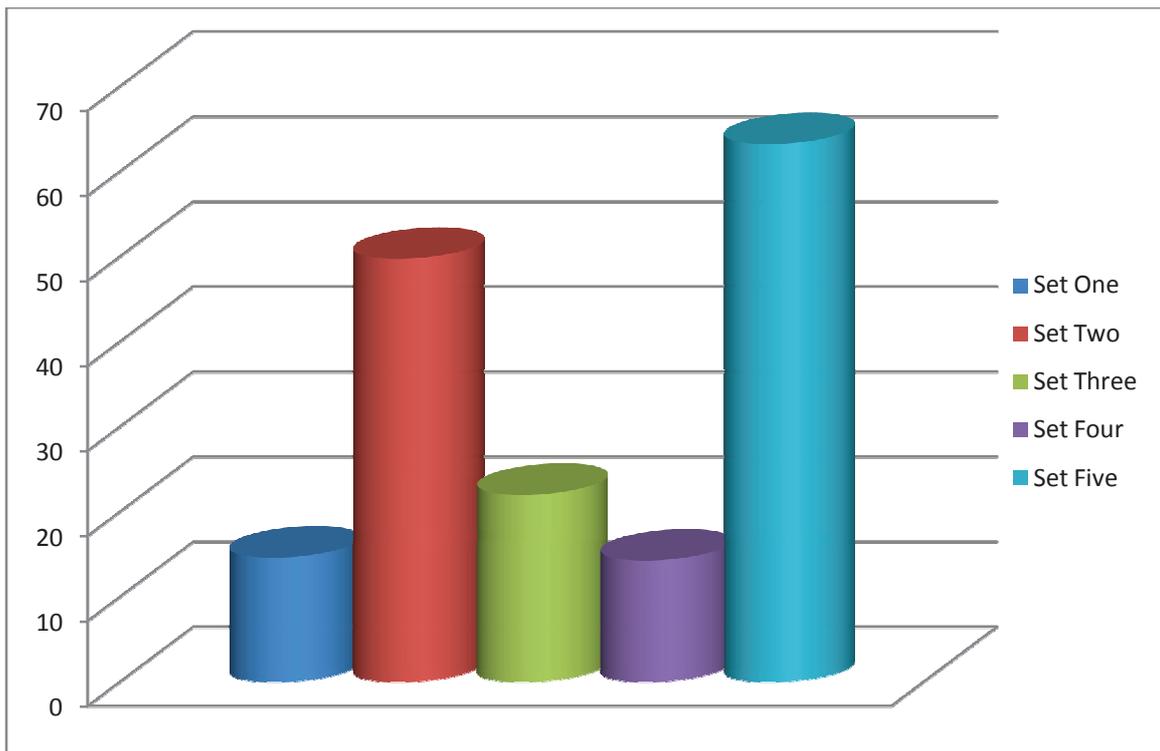
Fig.16 Percentage of Uncorrected Answers

The percentages of uncorrected answersappearafterobtaining the previous percentages. They reveal the pupils' reaction towards self-correction. Their reactions towards self-correction were not as expected, yet explainable.

In the first set, the percentage of uncorrected answers reaches 14,63%. The obtainment of this low result can be explained through the teacher's well explanations and insist on her pupils to correct the errors they recognize. Nevertheless, the percentage obtained in the second set of activities reveals that some pupils forgot self-correction because the percentage increases to 49,76%, which is considered the highest.

In the third and the fourth sets of activities, the percentages decrease to 22% and then 14,28% (See table 4 and Fig.16). After revising the copies of the previous set, the teacher re-

explained to her pupilsand insisted on the importance of self-correction. This resultedin a successive decrease in the percentage.

In the last set of activities, the percentage unexpectedly increases to 63,23%.As previously explained in Corrected Answers, the obtainment of this percentage is related to the non-inclusion of all the lexical items of the activity in the script used in the lesson. Logically, pupils did not have the chance to correct those items.

3.2.2. Analysis of the post-Test

3.2.2.1. The Post-Test in both Groups

After a month and a half of the teaching practicum in both groups, a test was carried out to determine what pupils have remembered. The test was the same for both groups; it took place simultaneously at 9:00 am on 30 April 2017. It was designed to check which of thegroups would performbetterabout retrievingand recognizingthe learnt lexical items. To avoid any variable that can affect the retrieval of the learnt lexical items(such as picturesencountered in the set of activities), the test took the form of Multiple Choice Questions (MCQ). The questions were various and included lexical items learnt in both groups. The test was designed as follows:

Dear students, please answer the following questions:

1- <u>Circle the appropriate letters: A, B or C.</u>

> Russia is situated in:
- A. South America.
- B. Asia.
- C. Europe.

> The word "Cruise" means to:
- A. Go on a beach holiday.
- B. See different places with a guide.
- C. Go on vacations in a big ship.

> Having a "pet" means:
- A. To keep an animal at home as a companion.
- B. To attach hair extension on your hair.
- C. To keep a dangerous animal at home.

2- <u>Tick (√) the right answer:</u>

> Which comes first?

☐ I go to sleep then, I get up.
☐ I get up then, I go to sleep.

☐ I start classes then, I leave home.
☐ I leave home then, I start classes.

☐ I have dinner, lunch then, breakfast.
☐ I have breakfast, lunch then, dinner.
☐ I have lunch, breakfast then, dinner.

☐ Always → generally → sometimes → often → never.
☐ Always → often → generally → sometimes → never.
☐ Always → generally → often → sometimes → never.

1/2

Fig.17.Post-Test1/2

3- Choose the best word to complete each sentence:

➤ Messi has .... the ball and scored a goal.
  a- Shouted   b- thrown   c- walked down

➤ The .... are waiting for the musical band to appear.
  a- Crowd   b- reporter   c- fans

➤ The .... has just .... in the airport.
  a- Airplane/ landed   b- musical band/opened   c- airplane/ arrived

➤ The .... of Algeria is almost 40 millions.
  a- Population   b- climate   c- country

4- Match the word with its definition:

	lives in a natural environment, it is dangerous.
1-A domestic animal	
	lives at home or in natural environment, it is not dangerous.
	consists of a number of cities.
2- A country	
	consists of a number of continents.
	to pass the night outside in a tent.
3- Camping means	
	to pass a day near the beach.

☺ Good Luck ☺

2/2

Fig.18Post-Test2/2

3.2.2.2. Post-Test Results

The test carried out (on 30April 2017) for both groups was later corrected and analyzed in an objective way. After analyzing the test, many results have been obtained from each group. These results have been further compared to each otherin order to see which of the groups performs better in terms of retrieving and remembering lexical items. This comparison is demonstrated in tables 5 and 6 and illustrated by their correspondent graphs (see Fig.19 and Fig.20). Furthermore, the average for each group was calculated based on the marks obtained in the test (see Tables 5 and 6). The difference between the two groups' average is what is later transformed into a percentage that reflects to what extent one group is better than the other in terms of recalling lexical items.

3.2.2.2.1. Control Group Results

The marks obtained in the control group are shown in the following table:

Marks / 14	05	06	07	08	09	10	11	12	13
Number of Pupils	04	02	02	05	03	04	01	02	01

Table5 Control Group Results
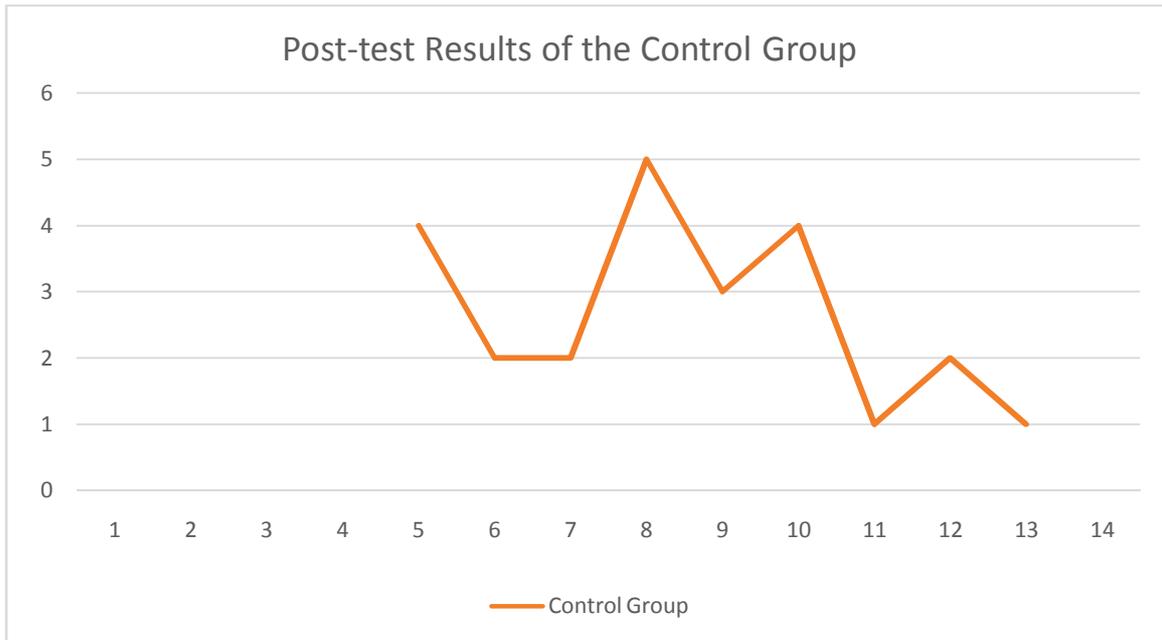
Fig.19 Control Group Results

The results obtained from the post-test carried out with the control group are to be compared with those of the experimental group (see table 5 and Fig.19). As expected, pupils of the control group did not perform as well as those of the experimental group. Eighteen (18) pupils succeeded in getting marks that are above the average, whereas six (6) pupils did not. As illustrated in Fig.19, the number of pupils decreases as the marks increase. This means that few pupils got good marks, while the majority got bad marks. In addition, it is important to mention that no pupil has obtained the full mark (14/14) in this group.

3.2.2.2.2. Experimental Group Result

The marks obtained in the experimental group are shown in the following table:

Marks / 14	06	07	08	09	10	11	12	13	14
Number of Pupils	01	02	02	01	03	05	05	03	02

Table6 Experimental Group Results
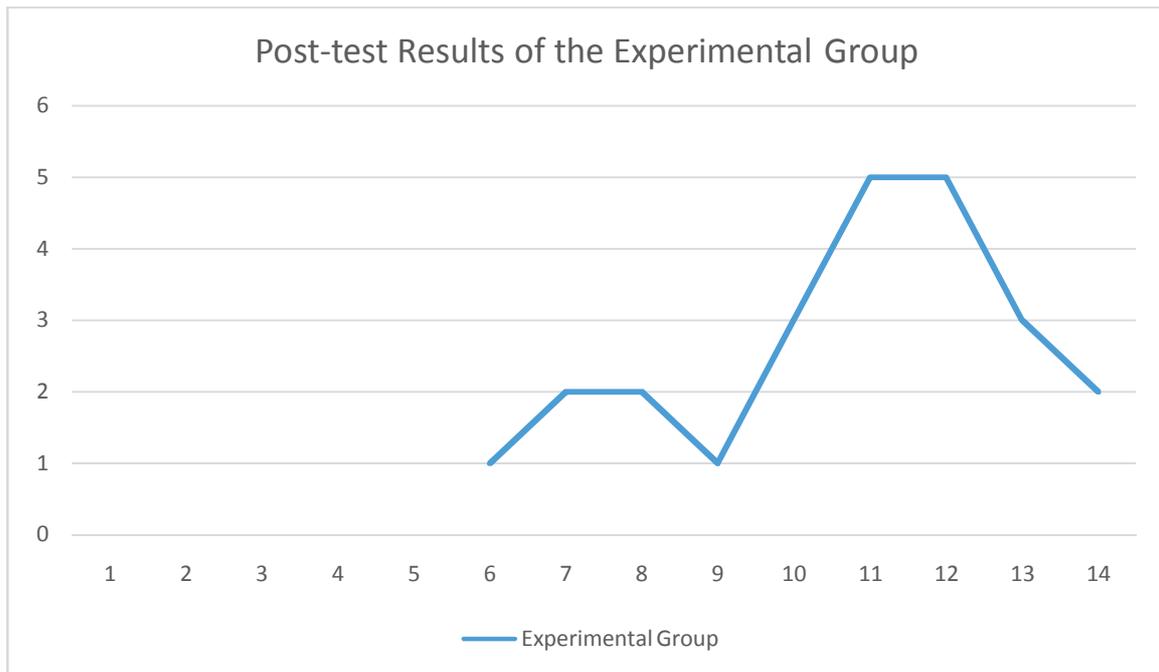
Fig.20 Experimental Group Results

The results obtained from the post-test carried out with the experimental groupaim to reveal the effectiveness of the GECM technique on pupils' recall capacity (see table 6 and Fig.20). As an initial remark, results show that most of pupils performed well in the test unlike pupils of the control group. Twenty-three pupils succeeded to get marks above the average (7/14), while only one pupil failed. As illustrated in Fig.20, the number of pupils increases as the marks do. This means that many pupils gotapproximatelythe full mark.Moreover, two pupils got the full mark in the experimental group unlike in the control one.

3.3. Discussion of the Findings

In the practical part of the current research paper, forty-eight middle school pupils represented the population of the study. The populationwas divided into control and experimental groups where the latter received a teaching practicum during a period of one month and a half. Five sets of activities conducted with the experimental group and a post-test with both groups are obtained. After analyzing the results of the five sets of activities and the post-test marks, significant conclusions can be drawn.

First, the results obtained from the five sets of the experimental group sessions are to be explained in relation to the major elements of the GECM. The percentages of correct and incorrect answers (see Fig.13 and Fig.14) are related to the first elements, guessing and errors. The diversity in percentages of correct and incorrect answers shown in Fig.13 and Fig.14 reflects the pupils' attitudes towards guessing and errors. It has been noticed that the pupils fear and avoid committing errors. As a result, they depend on each other to answer correctly. This explains the high percentage of correct answers in the first set (69%) and the low percentage of incorrect answers of the same set (30.14%). After the teacher's remarks and encouragements about guessing and committing errors, pupils depended on themselves and started submitting answers they doubt without checking their peers' answers. This is reflected in the decrease of the percentage of correct answers in the second set (41.94%) and the increase of incorrect answers of the same set (58.05%). In the remaining sets (set 03, set 04, and set 05), the percentages of correct and incorrect answers vary. The reasons may be related to some factors as the difficulty, familiarity or unfamiliarity, easiness and the number of lexical items included in the sets.

Second, the percentages of corrected and uncorrected answers shown in Fig.15and Fig.16are relatedto the third element of the GECM technique, which is self-correction. The percentages of corrected answers show how pupilshave reacted to self-correction during the five lessons

they received. From set 01 to set 04, the percentage of corrected answers variously changed. This change and gradual increase reflectthe pupils' positive acceptance of self-correction. In each lesson, the teacher encouraged her pupils to self-correct their errors and this has been successfully reflected in these results. Yet, an unexpected result has occurred in the fifth lesson, where the percentage of corrected answers decreased to 36,76% (see table3). The explanation of this result is related to the script of the lesson, where not all lexical items were included.

In addition, the percentages of uncorrected answers (Fig.16) also reflect how pupils reacted to self-correction. The percentage of uncorrected answers in the first set reached 14,36%, which is considered a lowe percentage. The reason might be due to the teacher's good explanations of the technique's elements. In the second set, the percentage increases to 49,76%. This increase might be related to the fact that pupils forgot the previous explanations in the first lesson (as already explained in uncorrected answers). In set three and four, the percentage of uncorrected answers started decreasing. Where in set three, it decreased to 22% and then to 14,28% in set four (see Fig.16and Table 4). Here pupils clearly understood the importance of self-correction and started applying it. As previously explained, the script presented in lesson five did not contain all the lexical items given in set five. As a result, the percentage of uncorrected answers increased to 63,23% in set five (see Fig.16).

The first three elements of the GECM technique, which are Guessing, Errors, and Correction,were variously reflected in the results obtained from the analysis of the five sets of activities. In addition, the last and the most important element of the GECM technique, Memorization, can be measured from the analysis of the results obtained from the post-test marks. The resulting post-test marks of the experimental group are represented in Table 6 and Fig.20 whereas the results of the control group are represented in Table 5 and Fig.19. First, the control group graph and table show that only one pupil succeeded to obtain the highest mark of 13/14 in the group. Out of twenty-four pupils, sixteen obtained marks that are above

the average (7/14). In addition, Fig.19 demonstrates that the majority of marks obtained are between 8/14 and 10/14. Second, the experimental group graph and table show that two pupils succeeded to obtain the full mark (14/14). Out of twenty-four pupils, twenty ones obtained marks that are above the average. In addition, Fig.20 demonstrates that the majority of marks obtained are between 10/14 and 13/14.

After comparing the results obtained from the analysis of the post-test results of both the experimental and the control groups, we can conclude that the experimental group results are remarkably better than those of the control group. On the one hand, the experimental group obtained the average of 10.70. The control group, on the other hand, obtained the average of 08.37. This means that there is a difference between the two groups. At the end, final calculations show that the experimental group out-performed by 16.64% the control group. These results, as previously expected, are due to the implementation of the GECM technique with the experimental group.

3.4. Limitations of the Study

Like any other study, the current study has its own limitations anddifficulties.During conducting this research paper, different constraints and obstacles have been encountered. One of the major obstacles faced was the very limited periodallocated to submit the research paper, the fact affecting its appropriate accomplishment. A period of three months was not sufficient to conduct an experimental study.Being restricted to the curriculum adopted in the middle school is another constrainingobstacle faced by the research. In an attempt to design the five set of activities, we were highly recommended to stick to the syllabus and just consider the lexical items found in the lessons.These lexical items were distributed unequally on the five lessons. This engendered a difficulty in keeping a balance between the sets as well as the inability to add more lexical items to some lessons as the input given later lacks

them(as required by GECM). Another noticeable obstacle wasthe pupils 'cheating in answering the first sets of activities where it was difficult to convince them that the sets weresimply tasks to do, not a test to be counted. Therefore, all the previously mentioned points might have contributed to making the present research paper lack the required in-depth treatment of an academic work.

3.1. Pedagogical Recommendations

Based on our experiences as Algerian pupils as well as our modest knowledge, we noticed that EFL classes in Algeria are taught grammar at the expense of vocabulary. Vocabulary is given less importance in comparison with the assumed key importance of grammar for success in English. Thus, most pupils neglect learning vocabulary and focus more on grammar. This is mainly ascribed to the fact that pupils are unconsciously driven to focus on grammar rather than vocabulary since grammar is the central subject for eventual evaluation. In fact, teaching grammar at the expense of vocabulary will inevitably weaken the projected mastery of any given language.

The present paper suggests a technique called GECM in order to enhance pupils' memorization of vocabulary. Through implementing GECM, teachers can at least teach grammar and vocabulary equally since they can take place simultaneously. What is found through the implementation of GECM in this study is that the technique helps to sharpen pupils' memory. Yet, to achieve better results we recommend further investigation of the use of this technique. GECM, in the current study,was implementedwith third middle school pupils aged between 13-15 years oldwhose level affectedhow the experiment was accomplished, in a sense that it put constraints on the designed activitiesto fit their low level. Thus, we recommend the implementation of the technique with higher-levelpopulation (secondary school, for example) for more effective involvement and reliable results.

Another important point to recommend concerns the number ofthe sets of activities to design: since the current study was conducted in a short period, designing the whole lessons was not possible. Instead, only sets of activities to be distributed at the beginning of the lessons were designed possiblyaffecting the unityof the lexical items included in the sets and those in the lesson. Set fivecan be considered a significantexample where the lexical items in the set were not fully covered in the lesson. This resulted in an unexpected situationof the pupils being unable to recognize their errors and self-correct them. Therefore, we recommend that the teachers or the researchersthemselvesdesign both the sets and the lessons.

Conclusion

The final chapter has been devoted to the analysis and interpretation of the pupils' sets of activities and ensuing post-test. Based on the findings shown in Tables (1, 2,3,4,5, and 6) and Figs (13, 14, 15, 16, 19, and 20) and their interpretations, GECM has beenrevealedto be effective in improving lexical items memorization. However, the results are not as satisfactory as expected. Therefore, the working hypothesis, predicting that third year pupils of Zeggout Ismail middle school will memorize lexical items more effectively when taught using GECM technique, hasonly partially been confirmed.

GENERAL CONCLUSION

Learning English as a foreign language demands mastery of many components mainly grammar and vocabulary. Vocabulary learning is as imperative as learning grammar when mastering Englishis attempted, though learning vocabulary can be a challenging task for many. Most learners find it difficult to cope with the prerequisite large amount of lexical items enablingthe easy use of language. Therefore, syllabus designers andinstructorsare responsiblefor developing teaching techniques to help learners memorize vocabulary items more effectively. One way of promoting vocabulary learning is by considering errors as learning opportunities instead of strictly fighting erroneous occurrences, but encouraging self-correction by the mistaking learners. Undoubtedly, allowing learners occasions to self-correct their errors is now believed to increase the memorization of the lexical items erroneously dealt with before.

In the current research paper, we have tested an instructive technique -labelled GECM- on a group of third year middle school pupils. We claim that the implementation of the GECM in a normal classroom raises pupils' memorization of lexical items. The major elements constituting this techniquerepresent a sequence of guessing, erring, correcting, and eventually memorizing. The findings reveal that third year pupils of Zeggout Ismail middle school have benefited from the implementation of the considered technique by memorizing lexical items more effectively compared to pupils having receivedordinary teaching. This partially agrees with our research hypothesis, which claims that students will memorize lexical items more effectively when encouraged to commit errors and then self-correct.

Finally, the conclusionsof this study should encourage teachers to explore areas of learners' error making and self-correction to help memorize vocabulary items.

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الملخص

إن للمفردات اللغوية أهمية بالغة في مجال تدريس اللغة وتعلمها، وقد اقترح الباحثون العديد من الطرق التي من شأنها أن تعزز تدريس هذه المفردات وتعلمها على حد سواء. وبما أن معظم التلاميذ يصادفون صعوبة كبيرة في اكتساب وتذكر المفردات الجديدة، كان من الأجدر تطوير تقنيات تدريس فعالة تساعد التلاميذ على إمكانية رفع قابلية تذكرهم. و عليه فان الدراسة الحالية تهدف إلى التحقق من مدى فعالية تطبيق وتبني تقنية تدريس المفردات (GECM) في تعزيز تذكر التلاميذ للمفردات المعجمية. ومنه فالدراسة تفترض بان رفع وتعزيز تذكر التلاميذ للمفردات اللغوية يكون أكثر فاعلية بعد تخمين مسبق لهذه المفردات ثم التصحيح الذاتي للأخطاء الناتجة عن التخمين. ومن اجل اختبار مدى صحة الفرضية، تم التطرق لكل من الأخطاء اللغوية التي تحدث أثناء التعلم إلى جانب الذاكرة البشرية وعلاقة الاثنين بتدريس اللغة. كل هذا تحقق في فصلين يمثلان الجانب النظري من هذه الدراسة، فيما تم تخصيص الفصل الثالث لمعالجة الجانب التطبيقي من الدراسة. أين تم إجراء هذا الأخير بمتوسطة زغوت إسماعيل بولاية جيجل. حيث أجريت الدراسة مع 48 تلميذا من السنة الثالثة متوسط يمثلون عينة الدراسة. علاوة على ذلك، تم تقسيم العينة إلى قسمين احدهما يمثل المجموعة التجريبية والأخر يمثل مجموعة تم اختيارها كشاهد. وللعلم فانه قد تم جمع البيانات والمعلومات من خلال تحليل خمسة مجموعات من الأنشطة قدمت في خمس دروس للمجموعة التجريبية، بالإضافة إلى تحليل نتائج الامتحان الذي تم إجراءه لكلا المجموعتين بعد نهاية التطبيق. وقد أظهرت النتائج المتحصل عليها وجود فرق معتبر بين أداء المجموعتين; أين كان أداء المجموعة التجريبية أحسن من نظيرتها فيما يتعلق باسترجاع وتذكر المفردات اللغوية. وقد نسب هذا الفرق في الأخير إلى فعالية تطبيق تقنية GECM.

الكلمات المفتاحية:

الأخطاء, المفردات اللغوية,GECM , الاسترجاع.

Résumé

Les articles de vocabulaire ont d'importance majeure dans le domaine de l'enseignement et l'apprentissage des langues. Les chercheurs ont proposé de nombreuses enquêtes dont le but est d'étudier les facteurs qui peuvent améliorer l'enseignement ou l'apprentissage des articles de vocabulaire. Il est généralement trouvé que les apprenants rencontrent des difficultés en essayant de se rappeler des nouveaux articles lexicaux ; ainsi, le besoin de techniques d'enseignement efficaces est essentiel. Le but du document de recherche actuel est d'examiner dans quelle mesure la mise en œuvre de la technique d'enseignement du vocabulaire (GECM) est effective dans l'amélioration de la mémorisation d'articles lexicaux des apprenants. Par suite, l'hypothèse d'études actuelle revendique que la mémorisation des articles lexicaux par les apprenant est plus grandes quand ils sont précédemment exposés à la supposition alors l'autocorrection des erreurs résultantes de mêmes articles lexicaux. L'explication des éléments majeurs, en somme, erreurs dans l'apprentissage des langues et la mémoire humaine, et leur relation à l'enseignement, est réalisée dans deux chapitres représentant la partie théorique de cette étude. De plus, le troisième chapitre a été consacré à la partie pratique de l'étude. Le dernier a été effectué dans le collège de Zeggout Ismail avec 48 apprenants ayant représenté la population de l'expérience. Cette population a été divisée dans deux groupes (expérimental et contrôle). Autant que la partie pratique est concernée, les données sont rassemblées de l'analyse de cinq ensembles différents d'activités présentées dans cinq leçons, en plus d'un posttest effectué avec les deux groupes à la fin de l'expérience. Les résultats obtenus de l'interprétation des données montrent une légère différence entre le groupe expérimental et le groupe témoin. Il a été trouvé que le groupe expérimental a eu de meilleurs résultats concernant la mémorisation d'articles lexicaux. La différence a été attribuée à l'efficacité de la technique GECM.

Les mots Clés: Erreurs, les articles lexicaux, GECM, supposition.