

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



**Teachers' Perception of the Working Memory-Based
Exercises for Enhancing EFL Learners' Retention of
Vocabulary**

A Case Study of First Year Rouina Mohamed Ghantar Middle School
Pupils of Ouled Djellal-Biskra

A Dissertation Submitted to Mohamed Kheider University of Biskra in Partial Fulfillment
of the Requirements for the Degree of Master in Sciences of Languages.

Submitted by:

Ms. MEZGHICHE Sara

Supervised by:

Mrs. HEBIRET Sara

Board of Examiners

Mr. TURKI Djamel

Examiner

Mrs. LADJALI Djamila

Chairwomen

Mrs. HEBIRET Sara

Supervisor

2016/2017

Dedication

There is no way to express my praise to **ALLAH** who grants me health and wisdom to enable me
achieve this aim.

To my dear father “Boubaker” for his belief in me.

To my tender mother “Fatima” for her never ending love.

To my lovely brothers “Abdullah, Miloud, and Ayoub” for their encouragement and help.

To my pretty sisters “Louiza, Karima, Hamida, Razika, and Sanae” for their continuous moral
support.

To my brother-in law “Omar” and his wonderful sons, the twins “Abdulmohaimen and Hadil”, and
the Little “Firas”.

A very special dedication to my dear friends “Siham, Aisha, Kalthom, Sara, Mariem, Sassia, Miraj,
Nassira, Fatmah, Aida, Nada, Hadjer, Warda, and Safa” also to all those who have believed in me
and have provided much friendship, and encouragement to help me carry out this work.

I dedicate this thesis to you all, and to my lovely country, Algeria and my homeland Palestine.

Acknowledgments

It was narrated by Abu Hurayra (may Allah be pleased with him) that the Prophet Mohammad (

Blessings and peace be upon him) said, "Allah does not thank the person who does not thank

People." Al-Adab Al-Mufrad: 218.

Above all, I would thank **ALLAH**, the Almighty for providing me with the patience and will to study, reach this level and finish my dissertation; all great praise to him.

First and foremost, I would like to express my extreme and genuine gratitude to my supervisor **Mrs. Hebiret Sara** for her grate help, for her precious guidance, for her perfect sense of understanding, for her encouragement, support and patience.

I am extremely indebted to **Mr. Turki Djamel**, **Mrs. Ladjali Djamila**, and **Ms. Zerigui Naima** for being kind to evaluate this research.

I would also like to thank all the teachers of English of Mohamed Kheider University for their help and guidance, and all of those who have being behind the elaboration of this work, especially **Mrs. Gorma Hafidha**.

I would also like to thank the director, teachers of English, and pupils of first year Rouina Mohamed Ghantar middle school for their valuable assistance and help.

Abstract

The present study aims at exploring the contribution of working memory-based exercises to enhance pupils' retention of vocabulary. It investigates the nature of the relationship between memory and level of retention new words. Furthermore, it attempts to report the extent to which that relation is supported by both teachers and pupils. The basic hypothesis in this study sets out that If the teachers use working memory-based exercises, namely as Total Physical Response (TPR), “Colored Paper”, and “Repeat After me Protocol”, then their learners’ would be able to retain vocabulary. We have opted for a descriptive reseach method for describing two variables: the use of working memory-based exercises as the independent variable and its impacts in developing pupils' retention of vocabulary as the dependent variable. In order to gather the data needed we have made a qualitative tool which is a classroom observation for classes of first year pupils at Rouina Mohammed Ghantar Middle school, Ouled Djellal- Biskra. In addition, we have administered two questionnaires; one for the teachers (03) and the other for the learners (40). Besides, to conduct this study, we have used a qualitative (descriptive) tool which is Stimulated Recall Interview submitted to sample of twelve pupils of First year middle school. The results obtained demonstrate the role of working memory-based exercises in improving learners' retention of words. Based on these results, the research hypothesis is confirmed that teachers need to follow and use such memorable practice in the classroom in order to improve their learners’ comprehension and construction of new vocabulary.

List of acronyms and abbreviations

EFL: English as a Foreign Language

FL: Foreign Language

L1: First Language

L2: Second Language

Q: Question

WM: Working Memory

VWM: Verbal Working Memory

V-S WM: Visuo-Spatial Working Memory

LTM: Long Term Memory

WMC: Working Memory Capacity

TPR: Total Physical Response

SRI: Stimulated Recall Interview.

LIST OF FIGURES AND GRAPHS

Figure 1.1.1: Baddeley's (2006) working memory model.....	07
Figure 1.1.2: The location of different tasks in the brain.....	11
Figure 1.1.3: The process of storing information.....	13
Figure 1.2.4: Some Total Physical Response examples.....	30
Figure 1.2.5: Examples of using colors and drawing pictures.....	31
Figure 2.1.6: Years of Experience.....	36
Figure 2.1.7: Teachers training in English.....	37
Figure 2.1.8: Teachers opinion about vocabulary.....	38
Figure 2.1.9: Teachers opinion techniques in teaching vocabulary.....	39
Figure 2.1.10: The effectiveness of teachers' techniques in teaching vocabulary.....	40
Figure 2.1.11: The effectiveness of these techniques in remembering vocabulary.....	41
Figure 2.1.12: The teachers' opinion about selecting amount of words.....	42
Figure 2.1.13: The teachers' opinion about the way of second language learning.....	43
Figure 2.1.14: teacher's opinion about physical movements.....	44
Figure 2.1.15: The effectiveness of role plays.....	45
Figure 2.1.16: the Teacher's Opinion about the Changing of Dynamics of the Lesson.....	46
Figure 2.1.17: The effectiveness of repetition method on pronunciation.....	48
Figure 2.1.18: The effectiveness of repetition method on embeds the word.....	49
Figure 2.1.19: The effectiveness of repetition individual words on learning vocabulary.....	50
Figure 2.1.20: The effectiveness of repetition on EFL classroom.....	51
Figure 2.1.21: The effectiveness of colors on learning and revising.....	52
Figure 2.1.22: The effectiveness of coloring on pupils' concentration.....	53
Figure 2.1.23: The teachers' opinion about the drawing and time expended.....	54
Figure 2.1.24: teachers' opinion about drawing pictures.....	55

Figure 2.1.25: Pupils’ gender.....	56
Figure 2.1.26: Pupils’ age.....	58
Figure 2.1.27: pupils’ opinions about learning vocabulary.....	59
Figure 2.1.28: Understanding the meaning of vocabulary.....	59
Figure 2.1.29: pupils’ ability to retain words.....	60
Figure 2.1.30: pupils’ opinion about the way of teaching vocabulary.....	61
Figure 2.1.31: the strategies that help to retaining vocabulary.....	62
Figure 2.1.32: the teachers’ use of gestures and movements.....	63
Figure 2.1.33: the use of new vocabulary in dialogue.....	64
Figure 2.1.34: the repetition of the important words.....	65
Figure 2.1.35: The ability to decode words through repetition.....	66
Figure 2.1.36: rewriting the words for instilling.....	67
Figure 2.1.37: the use of collective repetition in pronunciation.....	67
Figure 2.1.38: the teachers’ use of colors and pictures.....	68
Figure 2.1.39: the teachers’ use of underlining and coloring.....	69
Figure 2.1.40: the teachers’ recommendation for drawing.....	70
Figure 2.1.41: the use of colorful flashcards	70
Figure 2.1.42: the effective of colors on writing.....	71
Figure 2.1.43: the pupils’ opinion about the use of pictures in retention words.....	72
Figure 2.1.44: the use of coloring in revising exams.....	73

LIST OF TABLES

Table 1.2.1: Examples of TPR sequences	28
Table 2.1.2: Years of Experience.....	36
Table 2.1.3: Teachers Training in English.....	37
Table 2.1.4: Teachers opinion about vocabulary.....	38
Table 2.1.5: Teachers opinion techniques in teaching vocabulary.....	39
Table 2.1.6: The effectiveness of teachers' techniques in teaching vocabulary.....	39
Table 2.1.7: The effectiveness of these techniques in remembering vocabulary.....	40
Table 2.1.8: The teachers' opinion about selecting amount of words.....	42
Table 2.1.9: The teachers' opinion about the way of second language learning.....	43
Table 2.1.10: teacher's opinion about physical movements.....	44
Table 2.1.11: The effectiveness of role plays.....	45
Table 2.1.12: The teacher's opinion about the changing of dynamics of the lesson.....	46
Table 2.1.13: The effectiveness of repetition method on pronunciation.....	47
Table 2.1.14: The effectiveness of repetition method on embed the word.....	48
Table 2.1.15: The effectiveness of repetition individual words on learning vocabulary.....	49
Table 2.1.16: The effectiveness of repetition on EFL classroom.....	50
Table 2.1.17: The effectiveness of colors on learning and revising.....	52
Table 2.1.18: The effectiveness of coloring on pupils' concentration.....	53
Table 2.1.19: The teachers' opinion about the drawing and time expended.....	54
Table 2.1.20: Teachers' Opinion about Drawing Pictures.	55
Table 2.1.21: pupils' gender.....	56
Table 2.1.22: Pupils' age.....	57
Table 2.1.23: pupils' opinions about learning vocabulary.....	58
Table 2.1.24: Understanding the meaning of vocabulary.....	59

Table 2.1.25: pupils' ability to retain words.....	60
Table 2.1.26: pupils' opinion about the way of teaching vocabulary.....	61
Table 2.1.27: the strategies that help to retaining vocabulary.....	62
Table 2.1.28: the teachers' use of gestures and movements.....	63
Table 2.1.29: the use of new vocabulary in dialogue.....	64
Table 2.1.30: the repetition of the important words.....	65
Table 2.1.31: the ability to decode words through repetition.....	66
Table 2.1.32: rewriting the words for instilling.....	66
Table 2.1.33: the use of collective repetition in pronunciation.....	67
Table 2.1.34: the teachers' use of colors and pictures.....	68
Table 2.1.35: the teachers' use of underlining and coloring.....	69
Table 2.1.36: the teachers' recommendation for drawing.....	69
Table 2.1.37: the use of colorful flashcards.....	70
Table 2.1.38: the effective of colors on writing.....	71
Table 2.1.39: the pupils' opinion about the use of pictures in retention words.....	72
Table 2.1.40: the use of coloring in revising exams.....	72

TABLE OF CONTENTS

Dedication.....	I
Acknowledgements.....	II
Abstract.....	III
List of acronyms and abbreviation.....	IV
List of Figures and graphs.....	V
List of tables.....	VII
Table of content.....	IX

General Introduction

Introduction.....	1
1. Statement of the problem.....	1
2. Research Questions.....	2
3. Research Hypothesis.....	2
4. Research Aims.....	2
5. Significance of the Study	3
6. Research Methodology	3
6.1. Research Tools	3
6.1.1. Questionnaires	3
6.1.2. Classroom Observation	4
6.1.2. Stimulated Recall Interview	4
6.2. Sample.....	4

CHAPTER ONE: THE ROLE OF WORKING MEMORY FOR ENHENCING VOCABULARY

Introduction.....	5
-------------------	---

PART ONE: General Overview on the Working Memory

Introduction	6
--------------------	---

1.1.1. Definition of Working Memory.....	6
1.1.1.1. Baddeley and Hitch’s (1986) Definition.....	6
1.1.1.2. Cowan’s (2007) Definition.....	8
1.1.1.3. Alloway and Holmes’s (2010) Definition.....	8
1.1.2. Traits of Working Memor.....	9
1.1.2.1. The Working Memory Capacity.....	9
1.1.2.2. Duration of Holding Information.....	10
1.1.2.3. Interactions with Long Term Memory.....	10
1.1.3. Types of Working Memory.....	10
1.1.3.1. Verbal Working Memory.....	11
1.1.3.2. Visuo-Spatial Working Memory (V-S WM).....	11
1.1.4. The Process of Remembering Word.....	12
1.1.5. The Role of Working Memory In Language Learning.....	14
1.1.6. Teachers Attitudes toward Working Memory.....	15
1.1.7. Problems of Working Memory.....	16
1.1.8. Forgetting Words.....	17
1.1.8.1. The Trace Decay Theory.....	17
1.1.8.2. Displacement.....	18
1.1.8.3. Retrieval Failure Theory.....	18
Conclusion.....	19
PART TWO: TEACHING AND RETENTION OF VOCABULARY	
Introduction.....	20
1.2.1 Definition of Vocabulary.....	20
1.2.2 The Importance of Vocabulary.....	21

1.2.3 Types of Vocabulary.....	22
1.2.3.1 Receptive Vocabulary.....	22
1.2.3.2 Productive Vocabulary.....	22
1.2.4 Retention Vocabulary.....	23
1.2.5 Teaching Vocabulary.....	24
1.2.5.1 Selection.....	24
1.2.5.2 Sequencing.....	24
1.2.5.3 Presentation.....	25
1.2.6 The Characteristic of Young Learner.....	25
1.2.7 Working Memory-Based Exercises.....	26
1.2.7.1 Total Physical Response.....	27
1.2.7.2 TPR Sequences at Beginner Level.....	27
1.2.7.1.3 Total Physical Response Song.....	29
1.2.6.2 The Colored Paper Practice.....	30
1.2.6.3 Repeat after Me Protocal.....	34
Conclusion.....	35
Conclusion of The Theoretical chapter.....	35
 CHAPTER TWO: FIELD WORK	
Introduction	36
 PART ONE: Quantitative Data Analyses of the Questionnaires	
Introduction	36
2.1.1. The Teachers' Questionnaire	36
2.1.1.1. Analysis of Teachers' Questionnaire	37
2.1.2. Questionnaire for pupils.....	57
2.1.2.1. Analysis of Pupils' Questionnaire	57
Conclusion	74

PART TWO: Qualitative Data Analysis of the Classroom Observation and Stimulated Recall

Interview

Introduction	75
2.2.1. Classroom Observation.....	74
2.2.1.1. The Aims of Classroom Observation.....	74
2.2.1.2. Description of the classroom observation	75
2.2.1.3. The Classroom Observation Findings.....	77
2.2.1.3.1 Appropriate and Inappropriate strategies.....	77
2.2.1.3.1.1 Writing on the Board.....	77
2.2.1.3.1.2 Using Pictures.....	78
2.2.1.3.1.3 Repetition and pupils' retention of words.....	79
2.2.1.3.1.4 Using Movements.....	79
2.2.2. Stimulated Recall Interview.....	80
2.2.2.1 Analyses of Stimulated Recall Interview findings.....	80
2.2.2.1.1 Difficulty to Understand.....	81
2.2.2.1.2 Difficulty to Memorize New Words.....	82
2.2.2.1.3 Need for Colors to Remember.....	82
2.2.2.1.4 Call for Movements in the Classroom.....	83
Recommendation	84
General conclusion	86
References.....	88
Appendix 01: Teachers' Questionnaire	
Appendix 02: Pupils' Questionnaire	
Appendix 03: Classroom Observation Check list	
Appendix 04: Stimulated Recall Interview Questions	
Appendix 05: Pictures of Stimulated Recall Interview Test	

GENERAL INTRODUCTION

Introduction

Memory is considered to be an important cognitive issue in the teaching and learning process. Studies on the mind describe a unique system dedicated to storing, maintaining and retaining information that is working memory. This memory of work seems to be important for the processing and use of language. Pupils are required to have regular information in mind at the same time as they participate in other activities. However, the information stored in the working memory can be lost effortlessly through interruptions or excesses. Surely, the size of the memory capacity of each student can vary significantly. This is because the person with poor working memory often fights to evoke the great anxiety of many activities in the classroom, because they often forget the information, the instructions or leave the homework before their resolution. Therefore, our research tries to shed light on the memory of young students of the English ability to keep and retain the vocabulary.

1. Statement of the Problem

In order to comprehend or retain new FL words effectively, many working memory-based tasks should be selected and taken into consideration .We notice that the pupils in the middle school do not give importance to the foreign languages in general because teachers' negative feedback, the impact of anxiety on their performance, and the difficulties that they may face to remember the content. Talking about the improvement of the retention of vocabulary within EFL classes, it is required to consider a number of factors that influence it negatively or positively, for instance the structured of planning a lessons, the interested topics for the learners, and the techniques that the teachers use to present the new vocabulary. It is common to find that most students are still not able to convey effective vocabulary performance because of some troubles such as the difficulties to comprehend, the lack of remembering, and the lack of retention vocabulary that is considered to be one of the main factors that have negative effects on learners' performance. In this study, we try to

address the role of working memory tasks and strategies in enhancing EFL pupils' retention of words

2. Research Questions

On the base of statement of the problem, this study is intended to find answers to the following questions:

2.1. What is the nature of exercises that middle school teachers of English use to facilitate retention of vocabulary?

2.2. To what extent teachers' use of working memory-based exercises including the repetition method, the use of colors and total physical response help their pupils to remember vocabulary?

3. Hypothesis

The working memory gives a lot of opportunities for teaching and learning foreign languages. It enables the learners to interact effectively where the majority of them can present their vocabulary abilities to retain the new words. This leads us to hypothesize that:

- If teachers use working memory-based exercises, namely Total Physical Response (TPR), colored paper, and repeat after me protocol, then their pupils' would be able to retain vocabulary.

4. Research Aims

Our interest in the subject began about three years ago when we expectantly as a result to understand "human brain work". As result, we have determined that it is essential field to search on especially when it related to the educational domain. In this study, we will try to investigate how we can promote learners English vocabulary with elaborate their working memory. It common to recognize that EFL learners at this level need to base on vocabulary, grammar, and pronunciation as much possible and go further to another communicated skills. This study will shed light on a spread phenomenon within EFL classes and the difficulties associated with them in order to provide the nature of working memory-based exercise for enhancing retention of vocabulary.

5. Significance of the Study

This study is investigated to straighten the attention of EFL teachers and learners towards the effectiveness working memory-based exercises in vocabulary achievement and retention. Also, it is inspiring teaching activities that improve retention of English words through the designed worksheets. This research is shedding the light on working memory capacity perception and its function in learning English vocabulary.

6. Research Methodology

In order to investigate the use of working memory-based exercises to enhance EFL learners' vocabulary, we select the qualitative and quantitative methods. The qualitative method is exploratory or analytic in nature usually involving a small number of people. As result, it is appropriated to our study. In addition, the quantitative works with concepts of averages, and the use of statistics.

6.1 Research Tools

The data will be collected through the use of questionnaires, classroom observations and stimulated recall interview with pupils. The objective of the data depends on the overall objective of our research. It aims first at discovering and understanding how the use of working memory-based exercises enhances the pupils recalling of words. Second, it aims of providing that the pupils really need more practice to remember English vocabulary effectively.

6.1.1 Questionnaires

Questionnaires are used to generate statistics in quantitative research and can be scanned straight forward into computer for ease of analysis. .The teachers' questionnaire is designed to obtain data from the EFL teachers of Rouina Mohamed Ghantar middle school. It intended to show their perceptions about the working memory and to what extent they use several techniques to enhance the learners' vocabulary .The pupils' questionnaire is designed to examine the reception of

the working memory-based exercises to the first year pupils of Rouina Mohamed Ghantar Middle School. This research deals mainly with 40 pupils. The questionnaire intended to find out whether they receive such working memory-based practices to enhance their retention of vocabulary in the classroom. As well as, whether they have benefited from them.

6.1.2 Classroom Observation

In addition to the questionnaire, the observation in the classroom is also a data collection tool. Classroom observation is designed to observe carefully a phenomenon based on a background. The foundations and purposes behind the selection of the observation in the classroom as a key data collection tool for this research to: (a) give a clear view of what is happening in the classroom, it is a functional tool that allows observing different behaviors, and (b) observe and describe the inner representation of teaching and learning within the process.

6.1.3 Stimulated Recall Interview

Stimulated Recall Interview is a qualitative research tool in which the participants view a set of pictures and interviewed with direct questions about the previous lesson. It gives valuable information about students' thinking and argumentation. Also, it is designed to emphasis the learners' production after the session. In addition, it seeks to highlight whether pupils able to retain the acquired words. It is based random selection 7-12 pupils to examine pupils' comprehension and retaining of words.

6.2 Sample

Three questionnaires are submitted directly to all teachers (three teachers) of Rouina Mohamed Ghantar Middle School Ouled Djellal-Biskra, and they are all collected back after two days.

The population of the study is first year EFL pupils of Rouina Mohamed Ghantar Middle School Ouled Djellal old 11-14 years. This sample is intentionally selected to detect if the pupils face difficulties to recall new English words. Moreover, the pupils at this level are supposed to

focus mainly on the basic vocabulary of learning English language such as the colors, animals, classroom materials.

7. Structure of the Dissertation

This study addresses the role of working memory tasks and strategies in enhancing EFL pupils' retention of words; it consists of an introduction, two chapters and a conclusion. The dissertation starts with introducing the topic, then chapter one divides into two parts. The first part converses the role of working memory in facilitating the retention of vocabulary; the working memory definition, features, types, its importance in second language learning and its problems concerning the teaching and learning process. Part two deals with vocabulary learning strategies; it begins with definition of vocabulary, its types, and its importance. In addition, it includes the main aspects of what do we mean by working memory-based exercises. Moreover, we discuss the effectiveness of total physical response, repetition method, and the use of colors on facilitating the pupils' ability to remember. At the end, chapter two also separates into two parts; the part one discusses the findings in this study attempting to answer the research questions, it identifies the opinions about vocabulary held by pupils and teachers, the differences and similarities observe amongst them and the results obtained in the questionnaires. The second part discusses the results obtain from the classroom observation and stimulated recall interview. Lastly, recommendations and a general conclusion are drawn from this research.

CHAPTER ONE: THE ROLE OF WORKING MEMORY IN FACILITATING RETENTION OF VOCABULARY

Introduction

Students face several difficulties in learning English and especially in the domain of vocabulary. They are not able to memorize the vocabulary in large quantities, and can forget these concepts easily. The ability to store this information is essential for many classroom learning activities. In general, learning and memory are closely correlated. In addition, the working memory that is the main type of memory plays an important role in remembering that input. As a result, working memory-based techniques are a set of practices in which teachers use and follow to improve the master vocabulary of students.

This chapter, the focus will be on the theoretical part of the study. It is divided into two parts. The first part deals with a description of the working memory. The second part seeks to investigate the teaching and preservation of vocabulary with the use of such memory-based practices. It deals to present various teaching word method in relation to the memory.

PART ONE: General Overview on the Working Memory

Introduction

The process of remembering is one of the most imperative mental abilities of the human being, which is to revise the person's past encounters through the retrieval of data and information that have been learned. Many studies of the human mind investigate to focus on the process of supporting and producing information. As a result, scholars (e.g. Baddeley (1974), Engle (2002) Alloway (2010)) focus primarily on the study of memory in general and on working memory in a specific area. The working memory is considered as the search engine of the mind. This first part examines the literature basically in the working memory. It gives a certain background to the various concepts and elements that are relevant to the working memory. Also, it aims to discuss the topics related to working memory including the definition, types, different characteristics and importance of working memory to language learning.

1.1.1 Definition of Working Memory

Several definitions are given to the working memory since the psychologists interpreted several studies respectively in a broad or narrow way. The term working memory refers to the temporary storage of information related to the performance of other cognitive tasks such as reading, problem solving or learning. In the 80 years, two English researchers named Baddeley and Hitch coined the term "working memory" for the ability to hold different facts or thoughts in memory temporarily while resolving a problem or performing a task. Research of Baddeley also shows that there is a neural system in the frontal part of the brain responsible for processing information in which is namely as "working memory". According to Pisci, Domenico, and Geers (2010) the working memory is a tool used to help human beings perform efficiently and proficiently in all aspects of everyday life. This essential tool is defined as the ability to maintain and manipulate information in the mind for a short period of time, often called "short-term memory." If we look at the working memory literature, three main definitions are found and worth mentioning. These definitions comprise: (a) Baddeley and Hitch's (1986), (b) Cowan's (2007), and (c) Alloway and Holmes (2010).

1.1.1.1 Baddeley and Hitch's (1986) Definition

At the end of 1974, Baddeley and Hitch developed the idea of working memory within short-term memory. They have defined the working memory as a theoretical construct that was used in cognitive psychology to refer to the underlying system keeping the relevant information task during the execution of a cognitive task (Cited in Mackay, p. 3). In other words, working memory is an element of stimulated memory that allows the human being to keep data in the brain for a short period of time, even if working with it.

After much research on how memory works and the most important features of the process of retrieving information, Baddeley (1986, p34) has indicated that the working memory is "a system for temporal detention and manipulation of information during the performance of a series of cognitive tasks such as comprehension, learning and reasoning ". Also, it is an active part of the

memory that allows us to keep the information in mind for a short period of time while we work with it. In addition, it is the mental ability to remember and retain information and past events.

The term working memory becomes much more principal in the field of educational psychology after Baddeley and Hitch established that a single module. Their studies led to an important model “Baddeley model of working memory” (1986) comprised three aspects of working memory including a phonological loop, a visuospatial sketchpad, and a central executive that controlled the other two subsystems.

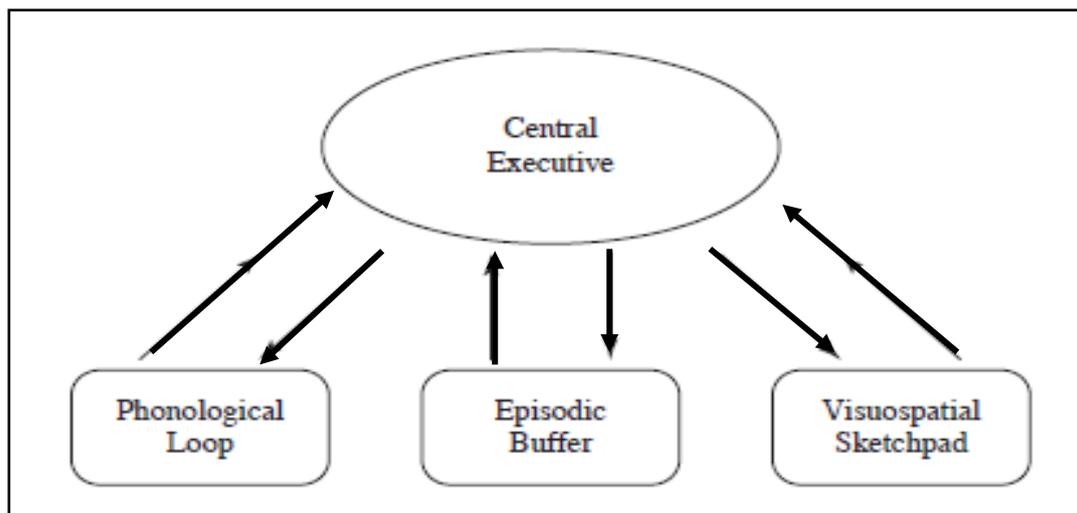


Figure 1.1.1 Baddeley's (2006) Working Memory Model.

The diagram shows that that working memory is a multi-component system important for variety of cognitive errands. Comprising storage and processing, the model has three components: the central executive and two slave systems. The slave systems are responsible for processing of verbal, speech –based information (articulatory loop) and visual-spatial information (visual-spatial sketchpad). The central executive, on the other hand, flexibly allocates the processing and storage components of the WM system (Cited in Engle, 2002). According to this model, the information is processed first parallel through the various sensory records (visual and audio), which forms the input unit of the information, and then passes to the short-term record where can be the subject of the summary of the logical or the preparation work.

1.1.1.2 Cowan's (2007) Definition

Despite the efforts made to confirm the characteristics and functions of this compound for the Baddeley model (1986), the Baddeley model is criticized at several levels, such as the secondary assignment of relations between the central administration and the subordinate systems. The simplicity of the model does not reflect the complexity of memory. Cowan described working memory as “cognitive processes that retain information in an unusually accessible state” (Cowan, 1999, p. 62). For Cowan (1999), working memory depends on activation that takes place within Long Term Memory, and is controlled by attention processes. This idea emphasis by Baddeley (2006) who declare that activation is temporary and decay unless maintained either through active verbal rehearsal or continued attention.

Activation is temporary and decays, unless maintained through continued attention. Some researchers even suggest that working memory capacity is the most important factor in general fluid intelligence (Conway, Cowan, Bunting, Therriault, & Minkoff, in press; Engle et al., 1999; Kyllonen, 1996). Unlike Miller (1956) who suggested that the storage capacity of working memory is around 2 to 7 items, Cowan(2001) claims that the capacity of working memory is limited to around four chunks. Review of studies suggesting that storage capacity is much lower than seven when participants are prevented from using plans such as chunking or rehearsal.

1.1.1.3 Alloway and Holmes's (2010) Definition

Working memory is often thought of as a mental workspace that we can use to store important information in the course of our mental activities. A good example of an activity that uses working memory is mental arithmetic Imagine, for example, attempting to multiply 43 and 27 together, and spoken to you by another person, without being able to use a pen and paper or a calculator (Cited in Gathercole and Alloway, 2007, p.4). In other word, this definition focuses mainly on the working memory major traits and its interaction with long term memory.

Besides, emphasizing with Alloway's view about the capacity of the working memory. Holmes(2010) claims that working memory is a kind of mental workspace that we use for many

aspects of everyday life, including reading comprehension, mental arithmetic and planning a series of thoughts or actions. That means that the working memory is your brain's Post-it note; it makes all the difference to successful learning.

1.1.2 Traits of Working Memory

It is important to understand the traits of working memory when we are designing several tasks that require mental effort. Based on a set of cognitive studies, working memory has different characteristics depends on the basics, the duration, the capacity, and its interaction with long term memory. Tamara van Gog (2005) assumes that working memory can be thought of as the equivalent of being mentally online. It refers to the temporary workspace where we manipulate and process information. Furthermore, the working memory cannot work in isolation. According to Baddeley (2006) no one physical location in the brain seems to be responsible for working memory capacity; but several parts of the brain seem to contribute to this cognitive structure.

1.1.2.1 The Working Memory Capacity

Working memory capacity (WMC) acts as a limiting factor of performance in cognitive tasks which are important in the learning process. Connie Malamed (2010) states a set of traits that depend on the capacity of working memory including (1) working memory is characterized by a small capacity. It is thought to hold four to five elements of new information at one time. (Some still stick to Miller's 7 plus or minus 2 bits), (2) because learning experiences typically involve new information, the capacity of working memory makes it difficult for many people to assimilate more than around four to five bits of information simultaneously, (3) the capacity of working memory depends on the category of the elements or chunks as well as their features. For example, we can hold more digits in working memory than letters and more short words than long words, and finally (4) the limitations on working memory disappear when someone works with information from long-term memory (permanent storage). Information from long-term memory is organized into schemata. Schemata are higher order structures composed of multiple elements that help to reduce the overload on working memory.

1.1.2.2 Duration of Holding Information

Since that the limited capacity of working memory varies widely between individuals. It is also depends on its length of investment data. Tamara van Gog et al (2005) state that (1) the new information in working memory is temporary. It is either encoded into long-term memory or it decays or is replaced, (2) unless it is actively attended to or rehearsed, information in working memory has a short duration of around 10-15 seconds, and lastly (3) similar to the capacity issue, it takes mental effort to hold information in working memory for an extended time and can also be a cause of cognitive overwhelm.

1.1.2.3 Interactions with Long Term Memory

The working memory characterizes by its interaction with the long term memory. Baddeley (2006) claims a set of facts which describe the process of holding and retaining the data, such as (1) there is a continuous transfer of information between long-term memory and working memory, both retrieval and transfer, (2) information is retrieved from long-term memory into working memory in order to make sense out of new information, additionally (3) information that we attend to and integrate into our knowledge structures is transferred or encoded into long-term memory.

All in all, it common that working memory plays a crucial role in the performance of a wide range of cognitive tasks, such as comprehension, learning, and reasoning.

1.1.3 Types of Working Memory

Referring to the multiple sources of input or the information, working memory has developed two specialists to work with all deferent kind of information and tasks. There are two categories of working memory: Verbal Working Memory and Visuo- Spatial Working Memory. Furthermore, the Figure bellow shows the classification of different task on the both sides of the brain. The brain's right hemisphere controls the muscles on the left side of the body, while the left hemisphere controls the muscles on the right side of the human body.

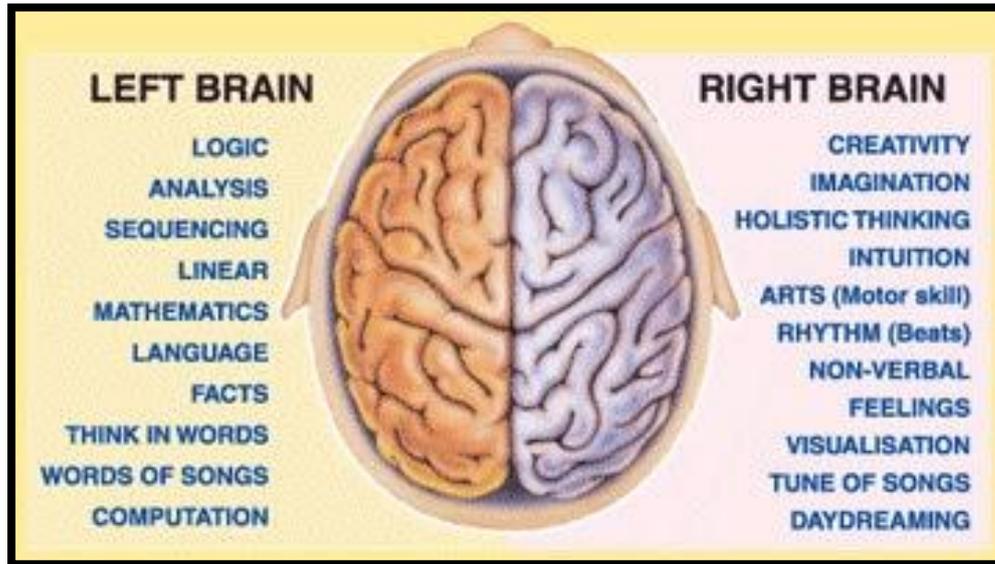


Figure 1.1.2 The location of Different Tasks in the Brain (brain lateralization, June 2017)

1.1.3.1 Verbal Working Memory

Based on brain imaging systems, researchers have found that most processes of the verbal working memory exist on the left brain's side. Alloway (2010) assumes that verbal working memory works with language. It deals with information that you can read and hear. It is also known as Auditory Working Memory. If the information you are thinking about is expressed with a letter or a sound, from an "A" to a musical note, you are using your verbal working memory. Touch the left side of your forehead. Beneath the skull is your verbal working memory. Furthermore; Alloway mentions the different situations that a person uses his VWM such as:

- a. Reading and writing.
- b. Listening to the teacher talking.
- c. Playing an instrument.

1.1.3.2 Visuo-Spatial Working Memory (V-S WM)

In visual state, the pupil can see what a word reveals like the different parts of the body or naming animals through the use of pictures, comic strips, flash cards, posters. Alloway (2010, p.7) declares that visuo-spatial working memory works with visual information, like images, numbers, maps, and patterns. If you can "see" the information in your head when you close your eyes, like

numbers for a math problem, the location of treasure on a map, to imagining what a football game looks like when listening to it on the radio, you are using your Visuo-Spatial Working Memory. Touch the right side of your forehead. Beneath the skull is your Visuo-Spatial Working Memory. V-S WM is used in various tasks such as:

- a. Doing math problems.
- b. Learning shapes.
- c. Remembering locations.
- d. Drawing a picture.

1.1.4 The Process of Remembering Words

The knowledge of vocabulary refers mainly to the amount of objects that contrast grammar which is “rule-based system”. This idea has been claimed by Thornbury (2002) who maintains “learning is remembering; it is not enough to learn words because we need to remember them after we memorize them” (p. 23). The question that we can ask here is how learners come to remember words? We all may have one common answer and said that it is through memory. Researchers argue that memory has an important interference in language learning this because without it learners will not be able to memorize information and as a result they will not communicate.

Memory is divided to three types: short term memory, working memory, long term memory. Short term memory, as Thornbury said is “the brain’s capacity to hold a limited number of items of information for periods of time up to few seconds” (Thornbury, 2002, p. 23). For example to remember things that we need to use after a short period of time as remembering a phone number and recite it in the same minute. Furthermore, Gairns and Redman argue that short term memory is “the ability to hold information over brief period (usually up to thirty seconds in duration)” (Gairns & Redman, 1986, p. 86). Schmitt claim that short term memory is used to store / hold information while it is processed and that can only stay for only seconds, he also tried to give some principles to short term memory; it is fast, adaptive, has small storage capacity, and it lasts for few seconds

(Schmitt, 2000, p. 131). In other word, the short term memory consists on the second stage of maintaining information on the brain.

The second type of memory is the working memory, in this type of memory is thought as a kind of “work bench”, where information is placed, studied, before it is moved to retrieval and then to long term memory. The information that inter to the memory comes from different sources such as outsides world through senses and also from long term memory. The information can be stored for twenty seconds before it is moved to long term memory. Working memory works like an audiotape which goes around and around. It gives more emphasis to the short term memory to be kept refreshed. To be good learners of foreign languages, learners should have the ability to hold words in working memory (Thornbury, 2002, p. 23). That means the more pupils acquire amount of words, the more their competency in learning language will develop.

The process of embed and retaining words progress through suitable and structured stages. According to Goodridge (2010), information is manipulated and analyzed in the working memory; to relate information to old one means that there is a link between the two previous ones and through this new information may be produced and this later moved to memory to be stored. The following diagram shows the process of memory:

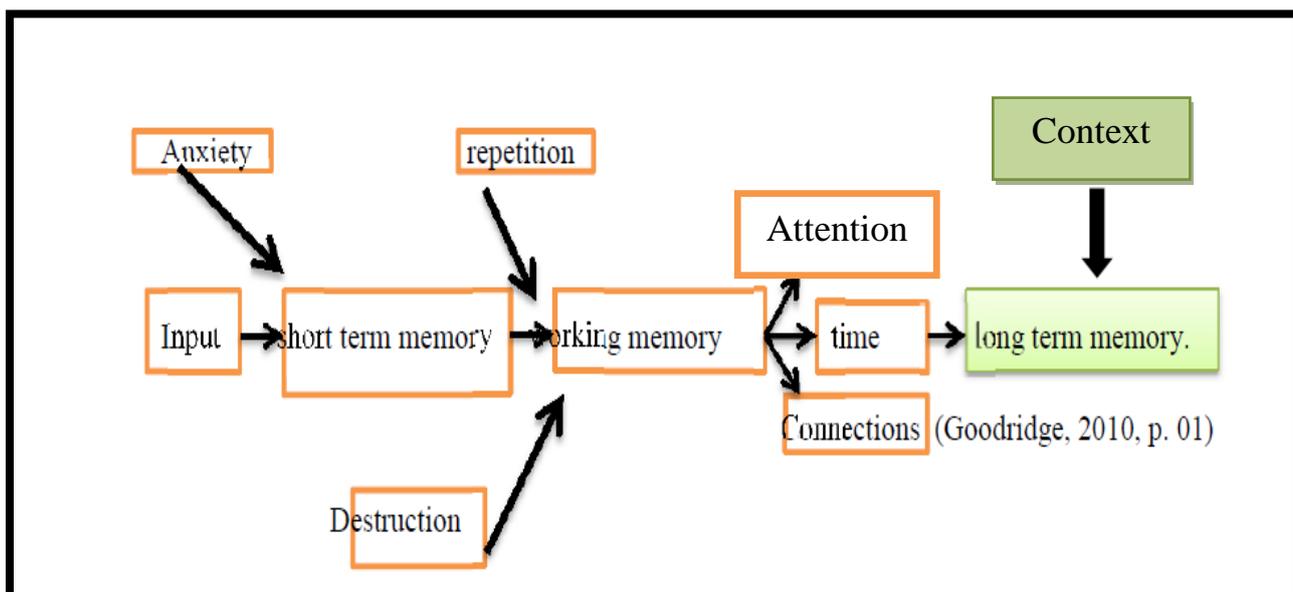


Figure 1.1.3 the Process of Storing Information

The third type is long term memory (LTM). This type is different from both other types because it is the last and the one in which we store all what we really have as knowledge, memories. It is defined as "the information that is acquired in a source of an experience and that persists that it can be retrieved long after the experience is past" (Encoding and Retrieval from Long Term Memory, 2006, p. 192). So, the long term memory can play the role of store of any information that human mind deals with.

We can see that LTM is the capacity that helps us to remember what happen to us for example accidents and events even though things that happen in childhood, remembering people, places, and things that face us in our daily life. It is also seen as the capacity that enables humans to remember many things (facts, skills, and things) that happened to us. Schmitt (2000) maintains that long term memory retains information for use in anything, but immediate future (2000, p. 131). The storage capacity of the long term memory is large in compare with the other memory types.

Long term memory is defined by Thornbury (2002) as "a filling system which has a large capacity and lasts overtime "(p. 24). He also claim that long term memory sometimes does not work well; an evidence is that some situations we can have new vocabulary, but we can notice it has been forgotten by the next lesson. Here, the long term memory did not work as we want.

1.1.5 The Role of Working Memory in Language Learning

The study on human mind traits and the process of dealing with information shows that there is significant relationship between the memory and learning the language. Alloway (2011) declares that learning and memory are very closely related. Without memory, learning would not be sustainable. Beside, Sawyer and Ranta (2001) stated that WM capacity is something that each learner brings to the classroom. However, whereas other individual differences may impact L2 proficiency, WM is necessary for language processing and use. Working memory has an essential role in processing input and storing and training output; researchers have suggested that working memory may influence second language (L2) proficiency by affecting factors such as phonological processing, entrance to comprehension the vocabulary, and grammatical rules.

Through studying the components of working memory and their functions, it is clear that there is a relationship between working memory capacity and language learning. Kaushanskaya (2007) declares that the phonological loop of WM is seen as a dedicated memory system responsible for learning unfamiliar verbal information. He adds that the learners who have higher scores on various phonological measures (e.g., non-word repetition, phoneme manipulation, etc.) are better in the retention of foreign vocabulary (Cited in Kaushanskaya, 2007). Therefore, the individuals with high WMC tend to have better learning than those individuals with low capacity of working memory and this due to the larger capacity they have to store information which is a result of their using of such strategies. From the above explanation it is found that working memory capacity has a crucial role in learning vocabulary.

Also, Reading comprehension is considered as the main effort that impact by the working memory capacity. Torres (2003) conducted a study which had two aims. Firstly, it investigated whether there was a relationship between working memory capacity and reader's performance on a main idea construction task (L1 and L2). Secondly, it investigated whether readers' profile of strategy use (L1 and L2) related to their working memory capacity. The results indicated that high-span readers activated prior knowledge, but they were aware of the need to update their knowledge-base assumptions. As a result, they avoided committing themselves to an early interpretation based only on prior knowledge like low-span readers.

1.1.6 Teachers Attitudes toward Working Memory

There are several strategies that have to be employed by most English teachers if they want to present a new vocabulary or lexical items to their students. It means that the English language teachers desire students to follow them to remember new vocabulary .Then; it needs to be learned, practiced, and revised to prevent students from forgetting. Techniques employed by teachers depend on some factors, such as the content, time availability, and its value for the learners (Takac, 2008). So, the working memory should be taking into consideration for effective learning and teaching process.

This makes teachers have some reasons in utilizing certain techniques in presenting vocabulary. In presenting one planned vocabulary item, the teacher usually combined more than one technique, instead of employing one single technique. Furthermore, teachers are suggested to employ planned vocabulary presentation as various as possible (Pinter, 2006). In other words, individuals with larger memory spans in both reading and speaking span tasks are more prone to keeping different stimuli active, and this seems to give them an advantage for a wide variety of cognitive tasks, among them vocabulary acquisition

1.1.7 Problems of Working Memory

In foreign language learning, learners are faced with fundamental problems in their efforts to learn the target language because of some cognitive factors like the working memory difficulties. The information held in working memory can easily be lost through distraction. The size of each child's working memory capacity can vary significantly. Children with poor working memory often struggle to meet the heavy demands of many classroom activities (Gathercole & Alloway, 2008). Besides, the low working memory capacity impacts the pupils' achievements of learning target language.

The English language learners are doing two jobs at the same time; they are learning a new language (English) while learning and retaining new academic concepts. They are literally moving between two different worlds (Mukoroli, 2011). Thus, students may face difficulties consisting (1) having difficulty remembering facts and procedures, such as new vocabulary words, verb conjugations or mathematical procedures, (2) exhibit slow retrieval of information and Fail to follow instructions despite repeated instructions, (3) demonstrate poor attention to detail, such as beginning to write a sentence and then struggling to remember all of the words in the sentence, skipping words within sentences, and writing shorter sentences, and lastly (4) make place-keeping errors such as losing track of steps completed or steps yet to be completed and either repeats steps needlessly or constantly has to start over (Gathercole & Alloway,2006).These difficulties have a

negative impact on core academic skills of reading, writing and mathematics. They may in turn affect performance in all subject areas.

In the framework of the research on the role of working memory in learning difficulties, many studies revealed that learning difficulties represented an expression of the lack of working memory (Ackerman et al., 1990). The results of the study show that there were statistically significant differences in the performance of the work memory among students with learning difficulties and ordinary ones in favor of the ordinary, which confirms the lack of performance on the memory tasks of students with learning disabilities. Gathercole (2008) assumes that there is a set of working memory failures in the classroom. Those failures obvious themselves in recurrent errors including (1) incomplete recall, such as forgetting some or all of the words in a sentence, or of a sequence of words Have difficulty starting work,(2) failing to follow instructions, including remembering only the part of a sequence of instructions, or forgetting the content of an instruction(for example, the child correctly remembers to go to Mrs. Smith's classroom as instructed by the teacher, but once there cannot remember the content of the message to be given), and (3) place-keeping errors for example, repeating and/or skipping letters and words during sentence writing, missing out large chunks of a task.

1.1.8 Forgetting Words

Generally speaking, we forget and have difficulties in remembering people's name, where we put things, or we can't remember where we put our keys, the question here is why do we forget things? According to psychologists, there are two answers. The first is more likely to be applied to forgetting in short term memory or as it is known (trace decay theory), the second in the long term memory or as it is called (interference and lack of consolidation).

1.1.8.1 The Trace Decay Theory

This theory suggests that the human short term memory can store information for only 15-30 seconds and after that information fades away unless it is rehearsed. This explanation assumes that memories leave a trace in the brain. The trace decay theory gives more focus to time and the limited

duration of the short term memory. This theory states that we come to forget because of the automatic decay of fading of the memory trace; according to this theory the events between learning and recall are not important and have no affect on recalling the information stored, what really contribute is the length of time the information has to retrained; the longer the time, the more the memory trace decay and as a result more information are forgotten (McLeod, 2008). Another explanation of the trace decay theory was given by Isabell Collet(2012) who assumes that human memories leave a chemical trace on their nervous system, but if those memories are not rehearsed, their short term memory can only store information for no more than 30 seconds, after that period the information is forgotten. One assumption related to this theory claim that events that happen between learning things and retrieval of information do not affect on information recalling, the only factor is time.

1.1.8.2 Displacement

Another and more acceptable belief about short term memory forgetting is that of displacement. According to Atkinson and Schifrin's (1968) model of memory short term memory has certain characteristics; one of them is its limited capacity that allows for no more than seven items to be remembered at the same time. This means that short term memory can hold only small amounts of information and when it is full new information takes the place of the old ones and moves it out. (Collet, 2012) As a result the old information is forgotten in short term memory. It is said also that the old information stored in short term memory is the first to be displaced by new ones, the support for this view come from studies using the "free-recall" method.

In this study, the participants listen to a list of words during a period of time after that they are asked to recall as many words as they can in any order they like. McLeod (2008) declares the findings of this study which show that participants can remember a constant number of words, and the first words are to be memorized in the long term memory because at the time where they are presented, they do not have to compete with other words for the limited capacity of the short term

memory, by contrast to words in the middle of the list are in short term memory until they are replaced by words at the end of the list.

1.1.8.3 Retrieval Failure Theory

Retrieval failure theory is when the information is stored in long term memory, but it cannot be retrieved. While we store information we do not only store words, but we also store information about the situation in which we store information, these are known as retrieval cues. So that whenever we remember these situations or we come across similar ones, they work as a trigger to help us to recall information stored in the long term memory. These cues can be: external (context) which refers to the environment where we store information, it can be place, smell, sounds, etc. Or internal (state) submits to inside humans, people's physical, emotional state while memorizing words.

The above theories emphasizes by McLeod (2008) who assumes that information is more likely to be retrieved from long term memory if the suitable retrieval is presented. For example when we receive good news while listening to music, we will be more likely to remember these news whenever we hear that song i.e. that the song works as a retrieval-cue, it was presented when the information was both encoded and retrieved

Conclusion

To conclude, this part has presented general overview on working memory. Besides, working memory study has shown that it is interrelated to all the communicated skill and language. Many working memory difficulties can appear to interrupt the learning process including miscomprehension, uncompleted recall, and failing to follow instructions. A better learning of vocabulary needs also to be accompanied with techniques to facilitate the task for learners and shorten time to memorize a large number of words that would help in educational carrier. Those techniques are considered to be the most suitable way to learn and teach words of educational carrier.

Part Two: Teaching and Learners' Retention of Vocabulary

Introduction

Vocabulary plays a prominent role in teaching and learning foreign language; furthermore it is considered as basic element for communication. Several scholars have focused on the concept of vocabulary and have provided various ways and techniques to increase it. Vocabulary is a list or a collection of terms or codes available for use as in an indexing system. (Merriam-Webster Dictionary). Remembering new words is often not an easy work for learners. That is why teachers try to utilize various techniques to present new words to them. In the second part of first chapter, it mainly reviews literature on vocabulary and such exercises to retain it. It gives some background to the various concepts and elements which relevant to the working memory-based exercises for retention of vocabulary.

The purpose of this part is to outline and discuss relevant subjects to the retention of vocabulary including: definition, importance, teaching of vocabulary; different characteristics of younger learners; and working memory-based exercises such as Total Physical Response techniques, the colored paper , and repeat after me protocol.

1.2.1 Definition of Vocabulary

Many definitions have been given to the concept of vocabulary comprise “The body of words used in particular language” (Oxford dictionaries, 2017). As well as, it has defined as the words used within a specific topic or occasion. In fact this definition is too narrow, thus that there are two forms of words ‘oral’ and ‘printed’ form. Richards and Renandya states that “vocabulary is a core-component of language proficiency and it provides much of the basis for how well learners speak, listen, read and write” (2002, p. 255). As a result, this definition denotes the conduct the interrelation among vocabulary and the four communicative skills.

Additionally, another definition have been mentioned as Saputras’(2007) who gives a comprehensive definition of vocabulary and considered it as all the words that are used in a language, have meanings and consist of some parts like verbs, idioms, pronunciation. As well as,

many websites have given a clear definition of vocabulary, for instance Vocabulary.com site has defined the term vocabulary as the symbols or signs that constitute a system which serve as a mean of expression/as in arts or craft. To sum up what have been said, the term vocabulary has many definitions according to different scholars' point of view. It can be detected that the learners who have a rich vocabulary could easily increase their four skills.

1.2.2 The Importance of Vocabulary

Vocabulary knowledge plays a significant role in learning any foreign language. The EFL learners need to increase and develop their vocabulary this is supported by Wilkins (1972, p111) who states that "If you spend most of your time studying grammar your English will not improve very much, you will see most improvement if you learn more words and expressions you can say very little with grammar but you can say almost anything with words". This implies vocabulary has an essential part when the learners attempt to convey.

The use of words in every daily life has a significant role in communication. Dale Johnsons' (2001, p.9) famous saying "When it comes to words, every person is destined to be a lifelong learner." In fact, people need to use words to express themselves in any language. Beside, vocabulary is the main tool for the students in their attempt to use English effectively. Individuals have different sets of vocabulary and they use them for different purposes. For example, oral and written mood of language often use different vocabulary and if you fail in using the suitable vocabulary in the suitable occasion, it will lead to misunderstandings (Kamil and Hiebert, 2005). Beside, after a long period of ignorance, vocabulary now is taken as dynamic matter of teaching and learning second language.

Furthermore, vocabulary knowledge plays moderator state in academic domain. This idea emphasized by Folse (2008) who has mentioned that English language learners need a continuous knowledge of vocabulary in order to improve comprehension and production in the foreign language. He added that while a basic level of vocabulary will allow learners to communicate some ideas to a certain degree, better communication can happen when learners have acquired more

vocabulary. In this case, Folse(2008) focuses on the use of vocabulary to achieve certain needs of communication.

To sum up, it is important for EFL learners to have more English vocabulary for learn English language successfully either for academic purposes or for communication with others whose first or second language is English.

1.2.3 Types of Vocabulary

The words in general differ basically according to its use and type. There are three classifications of vocabulary. The first one is according to its employ in the four communicative skills, the second is according to its frequency and the last is according to the text where it is found (or context). Many studies as Gairns (1991) and Nation (2001) divide vocabulary into two types receptive and productive vocabulary. Also, According to Redman (1991) these types also called passive and active.

1.2.3.1 Receptive Vocabulary

Receptive vocabulary refers to any words that the learners recognize and understand in reading and listening contexts. Bogaards and Laufer (2004) agree that receptive vocabulary refers to learning the meaning of a word i.e. to be able to translate it from L2 to L1 to know a word means that we are able to recognize it when we hear or see i.e. to be able to distinguish it from other words that seem similar in writing or pronouncing.

1.2.3.2 Productive Vocabulary

Productive vocabulary means words that the learners retain to be used appropriately in writing and speaking contexts. Bogaards and Laufer (2004) claim that productive vocabulary refers to learning to express a concept by means of an L2 i.e. Learners are able to translate a word from L1to L1 to know a word means that we are able to pronounce the word, write it, spell it well and even how to use it in grammatical patterns.

It is obvious that the above classification takes into consideration the four skills of language and its types: receptive skills (listening and reading), productive skills (writing and speaking).

Receptive vocabulary, on the other hand, is a set of words that are understood and recognized at reading and listening; however, productive vocabulary is a set of words that are actually used when speaking or writing.

1.2.4 Retention of Vocabulary

It is Known that the learned material is retained in the memory, the learners can benefit from it when recalling. This is what it calls retention. Retention, like learning, could be investigated to explain why learners notice, recall, and learn some words and not others. According to Schmitt and Schmitt (1995) the best way to remember words is to incorporate them into language that is known. Retention which is one of the most important objectives of vocabulary learning can be aided when the object of the learning is enhanced. Mohammed (2009, p.16) defines vocabulary retention as " the ability to keep the acquired vocabulary and retrieve it after a period of time to use it in different language contexts."

It is clear that learners need to be able to retrieve words at exact in time that they are needed. It is also true to say that retrieval differs according to whether it is receptive or productive (Cited in McCarthy et al., 2010). Souleyman (2009) states that there are processes that precede retention which is noticing, intake, and storage in the short term memory and later in the long term memory. Retrieval may be receptive as in listening and reading or productive as in speaking and writing.

Organizing vocabulary items into semantic clusters of seven to ten related things maybe more effective than showing a list of irrelevant words in separation will upgrade maintenance. For case, when presenting lexicon in planning for a perusing content, understudies ought to get a list of lexicon words that are related (e.g., wood, instruments, and building) by substance or context. Moeller et al. (2009) claim that by using such technique students rapidly relate the words with a subject or setting and more effortlessly store the lexicon in long-term memory.

1.2.5 Teaching Vocabulary

One of the objectives of teaching English as a foreign language for the middle school pupils in Algeria is learning the allocated vocabulary that will assist learners to express themselves in various

life situations. This led many researchers to suggest a significant principles and methods in teaching vocabulary knowledge. In the area of teaching vocabulary, Notion and Newton as cited in (Coady .J.Hukin1997, p.239) suggest that the teacher must take into consideration three main principles which are: selection, sequencing, and presentation of the lessons.

1.2.5.1 Selection

In order to take control of their vocabulary knowledge teaching, teachers need to know what vocabulary to teach, what an average of words the learners should take, and how to assess the teaching process.

1.2.5.2 Sequencing

In showing vocabulary there are two principle groupings which the instructor ought to take after: the first is the level of vocabulary and the second one is gathering and requesting of words In the principal grouping the sort of levels are: high recurrence, scholastic vocabulary, and technical vocabulary and low recurrence words. In the main level the utilization of English depends on 2000 high successive words and the learner here gains these words and moves to the following level which is scholarly vocabulary which implies that if the learner needs to bear on.

The teacher is indebted to obtain some educational words; however low recurrence vocabulary is exploiting as a part of request to utilize it for social purposes. Ben Sola (2012) sees that specialized vocabulary is extremely restricted in light of the fact that every area has its hold specialized terms. In the second succession gathering things which intends to gathering things inside a lesson is not set up through learning things together that are equivalent words or contrary energies, and the last one is ordering which is very essential in teaching because there is kind of combination between words for the purpose of creating meaningful sentences (2012, p .31). That view states the role of vocabulary which is central to knowing a language and using a language.

1.2.5.3 Presentation

In order to facilitate vocabulary to the teacher and the learner the lists are so important. So in this type, vocabulary exercise and individual learning are used to teach high frequency vocabulary and it includes few numbers of frequent words however low frequent words are a lot in number. We say that the teachers' main concern will develop some strategies and in the other hand the learner will concentrate with a specific piece of learning with the help of the strategies. Ben Sola (2012, p .33) claims that there are different principles for dealing with high and low frequency vocabulary. They can be put into practice directly or indirectly. The direct approach of teaching includes word building such as crossword puzzles activities, and the teacher concentrate on explicit exercises. Vocabulary learning goes with communicative skills such as listening to stories.

1.2.6 The characteristic of Young Learner

It is commonly ,the young children adores to miming and imitating; they are naturally in acting the functions, also they take pleasure in repeating because that provides them an intellect of achievement. That means the repetition is native behavior among children. Harmer (2007) states that younger learners are not necessarily better learners compared to older learners. Younger children are indeed more likely to develop native-like English proficiency than adult learners, as suggested by Lynne Cameron that children “reproduce the accent of their teacher with deadly accuracy” (Cited by Harmer, 2007). Yet research in language acquisition has shown that older learner exhibit more learning gains than younger learners. Lightbown and Spada (1999) point out to the various studies showing that older children and adolescents make more progress than younger learners. This may have been due to the children's increased cognitive abilities.

To make situation of teaching English to children (young learners) communicative, the English teachers should comprehend the communicative principles which are proposed by John and Morrow (1983, p.60-64) such as (a) know what you are doing, (b) the whole is more than the sum of the parts, (c) the processes are as important as the forms, (d) To learn it, do it, and (e) Mistakes are not always a mistake.

To achieve affective classroom , there are a several factors need to take into consideration for instance the pupils' characteristics among their age, ethnic, and family background. In addition, the teacher should be aware about the pupils' psychology in that stage (middle school). Scott and Ytreberg (1993, p. 3-4) propose some general young language learners' characteristics as follows:

- a. Their basic concepts are formed. They have decided views of the world.
- b. They can tell the difference between fact and fiction.
- c. They ask questions all the time.
- d. They rely on the spoken word as well as the physical world to convey and understand meaning.
- e. They are able to make some decisions about their own learning.
- f. They have definite views about what they like and don't like doing.
- g. They have developed sense of fairness about what happens in the classroom and begin to question the teacher's decisions.
- h. They are able to work with others and learn from others.

1.2.7 Working Memory-based Exercises

Having comprehended the theories of teaching language to young learners in general, the teachers of English could determine how English is to be taught to young learners –learning English through activities in social contexts.

Therefore, they are able to design materials and teach their students naturally on the basis of a social and economic environment; as a result, the students (children) master English through acquisition rather than learning. Working Memory-based Exercises refer to a series of actions a learner takes to facilitate the completion of a learning task according to his/her memory capacities. There are several techniques that the teacher may apply to enhance their learners' retention of vocabulary. In addition the retention of vocabulary is improved by the use of some working memory-based exercises like Total Physical Response (TPR) technique, colored papers practice, and Repeat after me protocol.

1.2.7.1 Total Physical Response (TPR)

1.2.7.1.1 Definition of Total Physical Response

Total Physical Response (TPR) is the name given to a learning strategy which has been developed and promoted by Professor James Asher of San José State University in California in 1977. It is now being practiced successfully by many teachers all over the world. Its scope, however, seems limited; it is not known to be used beyond beginner level (Cited in Mühren, 2003). Additionally, this method is based on using movements and gestures in order to present new words.

TPR is basically concerned with listening and linked to physical actions which used to reinforce the learners comprehension in some tasks. Especially at beginner level, Total Physical Response can be an essential element of any English lesson. On Asher's (1977) point of view, the teacher's movement provides the background knowledge which makes the commands more understandable. Richard and Rodgers (2001) state that learners are supposed to transfer what they have learned in his classroom into real live situations, learner are needed only to hear what have been said by the teacher and repeated, also they may answer if there is any question. They make no decision about the learning content, teacher is the master and guider of classroom he must be effective and creative in presenting his lessons.

1.2.7.1.2 TPR Sequences at Beginner Level

The characteristics of young learner are varying in several situations. The teachers have to take these traits into consideration. Mühren (2003) provides a set of tasks examples in applying TPR technique within the beginner classrooms. He assumes in his study the following TPR sequences that can be acted out but there are more ways to use them. Briefly, Pupils may find it interesting to write and act out a dialogue and create an enjoyable atmosphere. Like those sequences can be used in enhancing the learners communicative skills.

Table 1.2.1 Examples of TPR Sequences (Murhen2003,p.10)

<p>Going out for a walk</p> <p>(You are listening to the radio.)</p> <p>Stand up from your chair.</p> <p>Go to the radio.</p> <p>Turn it off.</p> <p>Go to the window.</p> <p>Look outside.</p> <p>Sit down again.</p> <p>Pick up your shoes.</p> <p>Put them in front of you. [...]</p>	<p>Writing a letter</p> <p>Pick up your pen.</p> <p>Begin at the top of the paper: <i>Dear...</i></p> <p>Write your letter.</p> <p>Look up from your paper.</p> <p>Look sad.</p> <p>Put down your pen.</p> <p>Rub your eyes.</p> <p>Pick up your pen.</p> <p>Go on writing.</p> <p>Stop writing.</p> <p>Put down your pen. [...]</p>
--	---

According to the table above, it is noticeable that those sequences present the main trait of total physical response which refers to imitating the teachers' recommends. Asher (1988) who developed this method, focused in exacting on two uniqueness of L1 acquisition which is mentioning in David Nunan's book (1991, p. 244) firstly,

” (a) the child gets a vast amount of comprehensible input before beginning to speak. Young children comprehend language which is far in excess of their ability to produce, and (b) there is a lot physical manipulation and action language accompanying early input. Throw the ball to Rudi', put your arm through here', etc. This action language, encouraging physical manipulation, is couched in the imperative”.

This ideas confirms that the comprehension comes first in order to generate the child ability of communication. Also, the actions can facilitate the retention of words and events.

1.2.7.1.3 Total Physical Response Song

It is common to know that children enjoy singing. There are several of action songs. The pupils sing and act out the words of the song. *'This is the way ...'* is an example of an action song.

This is the way you wash your face

wash your face, wash your face.

This is the way you wash your face

All on a Saturday morning.

This is the way you wash your hands

Wash your hands, wash your hands

This is the way you wash your hands

All on a Sunday morning.

This is the way you brush your teeth (...)

All on a Monday morning

This is the way you brush your hair (...)

All on a Tuesday morning.

Murhen(2003,p.11)

Like this kind of practice can affect the learners' interaction by combining with songs and actions. In addition, educators should take into account the age of the students. Young students may not be able to comprehend songs that contain profound ideas such as jealousy, suffering, or forgiveness. Furthermore, each age cluster has its own musical favorites and poor. Also, the time of day is imperative. For instance, some students are tired at evening and the music can energize, while other classes need to have their energy restricted once more (Griffes 1992, p 6-7). This means that the teacher should be aware with most of the pupils' needs and interests in particular time.



Figure 1.2.4. Some Total Physical Response Examples (tprword.com, June 2017)

The Figure above shows a set of TPR cases that can investigate the way of applying this method. Total physical response does not have to be taught in separation, as a disconnected activity. It can be included into established customs to make students familiar with predictable procedures and behaviors.

1.2.6.2 The Colored Paper Practice

Another useful method in teaching vocabulary involves the use of color. This methodology has been tested by Gnoinska (1998), an English teacher working at the Teacher Training College in Sosnowiec, Poland. The classroom research conducted by her using color to teach vocabulary gave fruitful results. The article published by her in the online journal “Forum” (1998, p.12) focuses on this concept. According to her, colors have a tremendous influence on human health and psyche. Lack or overabundance of certain colors can cause physical or emotional disorders. Exposure to color vibrations is used in the treatment of a number of diseases and mental problems. The color of the classroom walls, curtains or even the color of the teacher’s clothes can either soothe or irritate learners. Color is also an important tool in visual thinking. It separates ideas so that they stimulate creativity.

Highlighting and underlining the most important presented words can measure the learners' attention. Anuthama (2010) claims that it also an effective way to teach semantic categories and word differences by underlining all words in a text connected with a given topic with a colored pencil. He sees that the teacher could mark adjectives, with positive and negative meanings, with different colors and underline synonyms or antonyms of certain words. We could also practice morphology by means of coloring all prefixes and suffixes in a passage and underlining the stems of given words.

Using the colors of drawn pictures on the blackboard or on flash cards may attract the learners attention .The latter can be used again and again in different contexts if they are made with cards and covered in plastic They can help young learners easily understand and realize the main points that they have learned in the classroom. Hill (1990) states that the classroom environment is not the most suitable place for learning languages, as a result teachers tried to find different aids that may improve this situation and make the task of learning languages easier.

One of these aids is pictures which help while explaining new words to students because pictures can explain what words cannot do in some cases (Hill, 1990, p.1). The following are some examples of using colored and drawing pictures:



Figure 1.2.5 Examples of using Colors and Drawing Pictures (personal photographs,

March2016)

Colors have become part of communicative language and are consistently used mainly in products, goods and sales. Also, they can be used as a parallel language that can be utilized for hint or declaration of certain meanings if so, why not take advantage of them in the educational process to help deliver our educational message and achieve better results. Canlearn center (2013) presents a useful step namely “color code”. Physical coding, such as consistent colors for different subject areas, can act as triggers to help students remember information.

- a.** Try coding when teaching new concepts: when teaching sentence structure nouns are always red, verbs are always green etc.
- b.** Spelling – highlight difficult parts of new words.
- c.** In side of teaching vocabulary, it is better to teach new words in categories or families and color code the categories.
- d.** Encourage the use of colored pens or highlighters (remember, yellow is the LEAST effective).

From another analytical point of view, the use of color a effect over the vocabulary of pupils has been the subject of many studies. As in Sprenger (1999) studies’ the brain profoundly hypothesizing that the human memory is divided into five types of lanes such as the semantic memory, the episodic memory, the long term, the automatic memory and the emotional memory. These lanes are important pedagogically as they guide teachers to diversify and adapt their teaching methodology and make use of the brain natural learning capacities by using each lane of memory to enrich their teaching strategies.

In addition, colors have a remarkable influence on human mind and psychology. Excess of certain colors can reason emotional or physical issues. Sprenger (1999) focuses on the importance of the emotional factor while teaching L2 vocabulary by diversifying the implemented educational and assessment tools. She argues that if students are engaged emotionally in learning vocabulary, they remember more effectively because the recently learnt lexical items will be stored in the emotional lane. Moreover, she strongly suggests using more than one assessment tool such as portfolios, presentation, radio shows as well as the traditional assessment tools in order to engage

learners, take care for their needs and explore their talents deeply. She (1999, p.67) claims that “I provide a variety of teaching styles and assessments. Understanding and assessing memory lanes give me tools to help students remember and learn- in as many words as possible.”

1.2.6.3 Repeat after me Protocol

Repetition is one of the old methods of getting the information and retaining it, and here is the repetition of the information whether it is by the teacher or the student; has a positive impact on the collection of pupils, increases the retention of information. Further the impact of learning, an effective way in which the interaction between the teacher and the learner takes place. In fact Dr. Olle Kjellin, a Swedish neurophysiologist and advocate for quality choral repetition, encourages teachers to have students repeat words and phrases one hundred times or even more (T.Jones,2015). According to researchers, such as Baddeley, Gathercole, and Papagno (1998), when a pupil learns a new word, it needs to be repeated aloud in order for sounds to be assigned to the word, which facilitates the transfer of the word to the student’s long term memory. In other words, without repetition pupils may allocate the wrong sounds of word before it is transferred their long term memory, or it may not be transferred at all.

On other hand, Schmitt (1997, p. 215) states that “cognitive strategies are similar to memory strategies but they do not concentrate on manipulative mental processing but rather on repetition and mechanical means to study vocabulary”. That means he devotes on the cognitive strategies which refer to written and verbal repetition to enhance the learners mastery of the language.

Therefore, teaching individual terminologies, which is an intentional strategy, educates pupils who are not active enough in the learning process, and it basically depends on memorization. On the other hand, some researchers have included the importance of teaching individual words in some cases.

Conclusion

Learning helps to communicate with others, but memorizing words can be considered as essential factors that affect the communication progress. Our memories must memorize information without interference from any factor either from the outside world (context) or from within the student; "His physical, emotional state." Many ways can be followed to make the learning process easier and more comfortable for the pupil. Those ways comprise the updated methods of teaching new vocabulary. A better learning of words must also be accompanied by a series of techniques such as repeat, TPR, colored paper or images; to facilitate the task of the learners and to shorten the time to memorize a large number of words that would help in the educational process. Besides, those techniques regard as the most suitable way to learn and teach the academic words.

Conclusion of the Chapter One

Finally, teaching and learning vocabulary is one of the most fundamental and difficult tasks in the field of foreign language. Learning a new word is considered as a challenge to foreign language learners. There are different methods suggested to handle the learning process. So that, teachers should consider that they are accountable to help pupils use the most appropriate strategies, and carry on strategies they lack. Teachers should be conscious of almost issues related to the learners' working memory capacity. The pupils with poor capacity of remembrance can struggle to be with task. As cites in Harmer (2001, p160) Adrian Underhill affirms that teachers should know how to work on the process, and how to make their learners involved in the instructional activities "...engaging the learner ... is essential to any activity that is to have a high learning yield". It is insufficient to teach just the word meaning, teachers should cover also the word's retention, arrangement, and use. Though a set of complexities may face teachers while presenting and examining their pupils' recalling of words, they have to create appropriated techniques that fit their pupils' levels and needs; and try to support them to get pleased consequences.

CHAPTER TWO: FIELD WORK

Introduction

The two last parts presented an overview of the working memory-based exercises in relation with EFL learner's retention of vocabulary. The next step of any research design is to move to something more practical in order to provide this research more credibility. Outstanding to research limits, this research is non-experimental; therefore, the method that is selected to conduct this research is the descriptive method. This chapter is separated into two parts; Part one is the quantitative data analysis of questionnaires for teachers and pupils' findings. Also part two implies qualitative interpretations of classroom observations and stimulated recall interviews' data. This chapter also includes a section for further recommendations and suggestions.

PART ONE: Quantitative Data Analyses of the Questionnaires

Introduction

In order fit the goals of the research and to answer questions to this research, three research tools were used: Questionnaire for teachers and pupils to highlight the different views of the use of working memory-based exercises such as TPR, repetition and the use of color. Furthermore, we used classroom observation to get more precise findings.

2.1.1 The Teachers' Questionnaire

The questionnaire is administrating to three (03) teachers of English language at Rouina Mohamed Ghantar Middle school Ouled Djellal-Biskra. The selection of the sample was based on all this school teacher of English. Moreover, this study attempts to investigate the major causes which lead vocabulary difficulties to retain and occur. Also it attempts to suggest some recommendations for teachers to raise their awareness in using such developed practices and working memory techniques in particular.

The questionnaire consists of both open ended questions and close ended ones which involve Yes/No answers and selected items .It is divided into three sections being (a) section one includes background information. This section comprises questions about teachers from question one to two

which aims to gather general information about teachers such as: length of teaching experience, attending training programs. That is because we need to know whether those teachers have already experienced in teaching English language or not, (b) section two is concerning about teaching vocabulary to middle school pupils. The aim of such section is to investigate teachers' knowledge about teaching vocabulary. This section includes questions from question three (3) to six (6) which attempt to examine the participants about their opinions towards teaching vocabulary comprises the importance of vocabulary, the felicity to teach vocabulary, which methods they use to teach it, vocabulary teaching strategies.

Finally the section three is about working memory-based exercises. The objective of this section is to obtain information from teachers of English concerning the main vocabulary aspects and strategies that teachers usually focus on in classroom interaction. It divides into three (03) major parts (a) total physical response approach and vocabulary teaching starts from the question seven (7) to twelve, (b) repeat after me protocol and vocabulary teaching (Q13/Q17), and (c) colored papers and vocabulary teaching (Q18/Q22).

2.1.1.1 Analysis of Teachers' Questionnaire

Section one: Background information

Item01: How long have you been teaching English?

Table 2.1.2 Years of Experience

	Teacher (1)	Teacher (2)	Teacher (3)
Years of experience	10 years	16 years	22 years
Total	3 teachers		

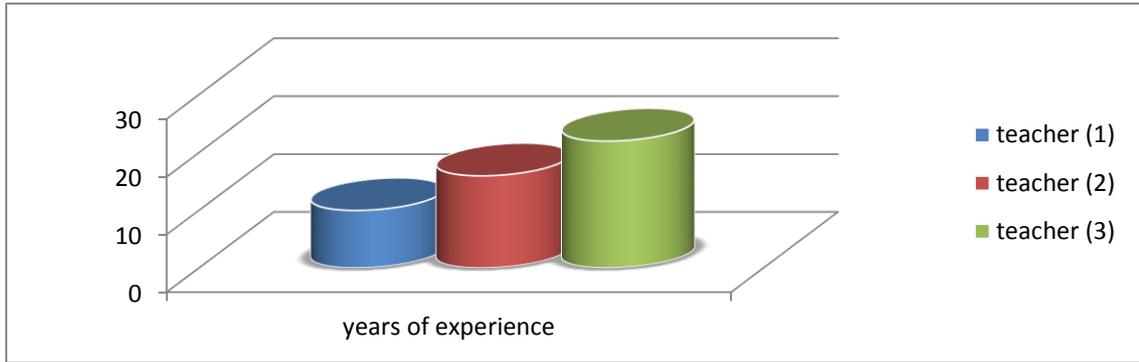


Figure 2.1.6: Years of Experience

Table and graph appear that all of the teachers of Rouina Mohamed Ghantar Middle school have an experience more than 5 years, the teacher (1) has 10 years the teacher (2) has 16 years and the teacher (3) has 22 years .This indicates that the teacher's experience in teaching is long and sufficient to become experienced teachers and have helpful attitude in teaching.

Item 02: Do you have any training in ENGLISH before?

Table 2.1.3 Teachers Training in English

Item	Number	Percentage
Yes	3	100%
No	0	0%
Total	3	100%

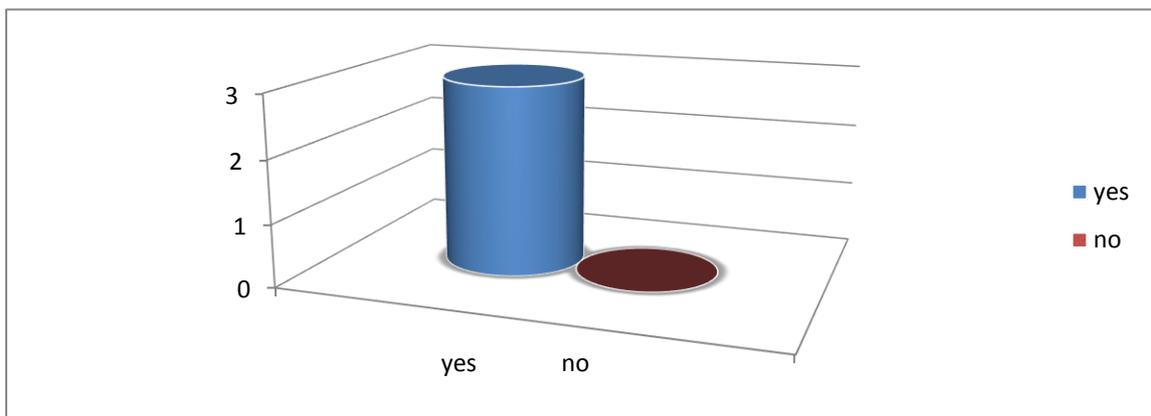


Figure 2.1.7 Teachers Training in English

The aim behind this question is to check whether the teacher of English language in Rouina Mohamed Middle school attend training programs or days. All of the teachers (100%) mention that they have been receives trained in English as shown in the table and graph above. This confirms that they have been always updated about the new methods and approaches in English teaching techniques.

Section Two: Teaching Vocabulary to Middle School Pupils

Item03: Do you like teaching vocabulary?

Table2.1.4 Teachers' Opinion about Vocabulary

Item	Number	Percentage
Yes	3	100%
No	0	0%
Total	3	100%

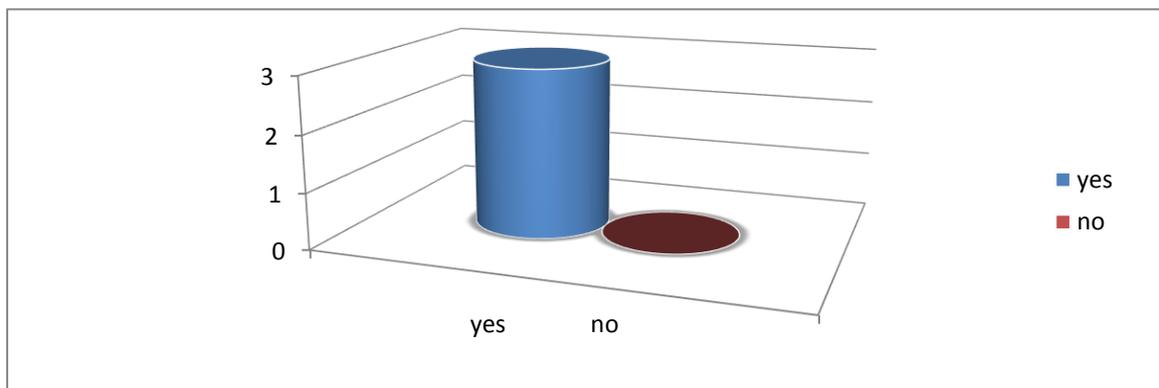


Figure2.1.8 Teachers' Opinion about Vocabulary

We notice from the table and the graph that all the teachers like to teach vocabulary. The teacher(1) says that he likes to teach vocabulary because it is the main principal ,whereas the teacher(2) states that to be able to communicate and interact with people (English speakers), the third teacher (3) is argue with the previous two teachers and adds that teaching vocabulary helps pupils to develop competencies of speaking and writing . The overall views of teachers state that

vocabulary instruction is a vital element in teaching English. It means that the strength of vocabulary acquisition goes in equivalent with the speaking and writing skills of pupils.

Item 04: How do you teach vocabulary?

In this question we ask teachers about their methods in teaching English vocabulary and they answered as follow: Teacher (1) says that he teaches vocabulary through the context (listen/speak/read and write). Teacher (2) supposes that she teaches vocabulary through the context. Teacher (3) declares that she teaches vocabulary through the context, and real life situations. It seems from the answers of the teachers that are all teach the vocabulary through the context.

Item 05: Does this technique help pupils to understand the meaning of the words?

Table2.1.5 Teachers’ Opinion about Techniques in Teaching Vocabulary

Item	Number	Percentage
Yes	3	100%
No	0	0%
Total	3	100%

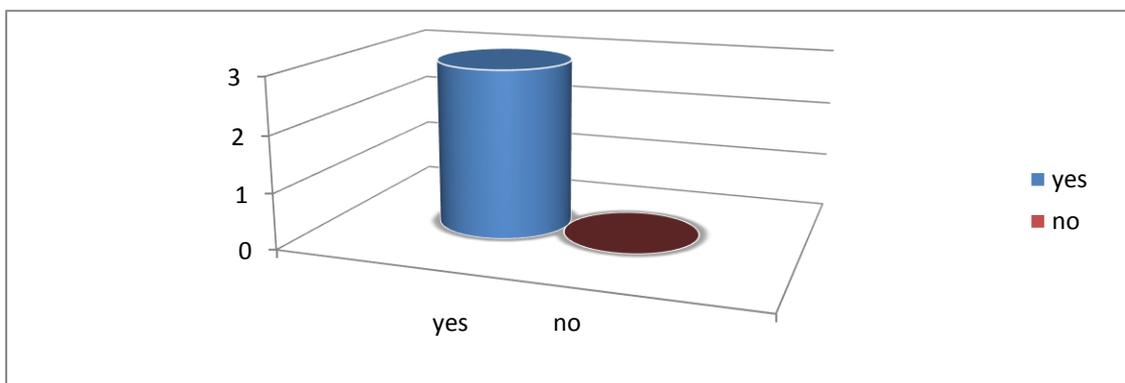


Figure2.1.9 Teachers’ Opinion about Techniques in Teaching Vocabulary

From the table and the graph that follows, it is clear that all of the teachers (3) corresponding to (100%) claim that their techniques in teaching vocabulary help the pupils to understand the meaning of the words. The results show that teachers follow their own methods to facilitate the

lesson to their pupils. From their answer to this question they confirm that applying such appropriated practice has develop the pupils’ ability to comprehend.

Item 06: Does this technique help pupils to remember the word and it meaning correctly during the session?

Table2.1.6 the Effectiveness of Teachers’ Techniques in Remembering Vocabulary

Item	Number	Percentage
Yes	3	100%
No	0	0%
Total	3	100%

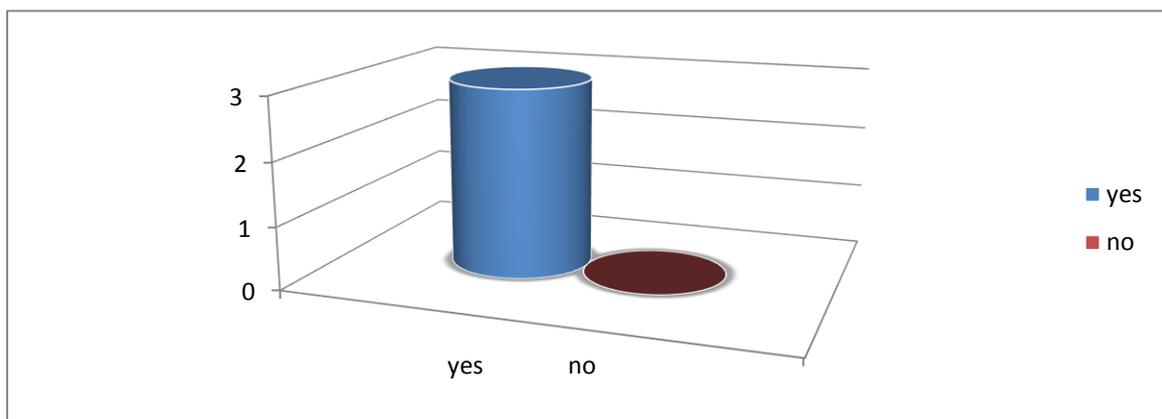


Figure2.1.10 The Effectiveness of Teachers’ Techniques in Remembering Vocabulary

The results of the table and the graph show that all of the teachers said that their technique helps pupils to remember the word and it meaning correctly during the session .The first teacher claimed that motivation and repetition make them memorize .whereas the second teacher did not answer, and the last teacher stated that as the Chinese proverb says that “Tell me and I forget, teach me and I remember, involve me and I learn “.

Item 07: Do these techniques help pupils to remember the word and its meaning correctly during the examination?

Table 2.1.7 the Effectiveness of Teachers' Techniques in Remembering Vocabulary

Item	Number	Percentage
Yes	3	100%
No	0	0%
Total	3	100%

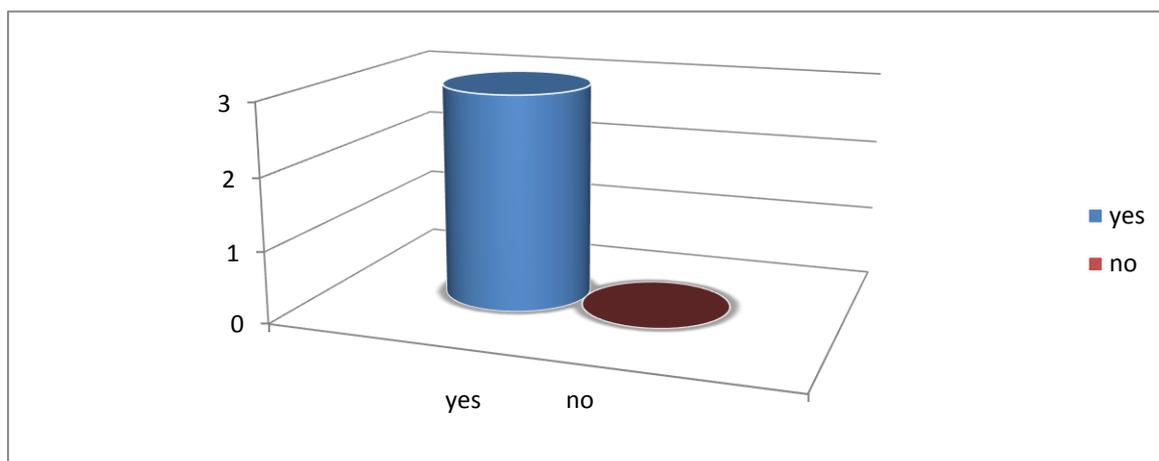


Figure 2.1.11 the Effectiveness of Teachers' Techniques in Remembering Vocabulary

The table and the graph above show that all of the teachers are agreed that this technique helps the pupils to remember the words during the examination. The first teacher said it is according to the pictures, writing and “sounds” but the two other teachers did not give their justification.

The results obtained demonstrate the importance that teachers offer to vocabulary teaching, and their application of different techniques for an effective teaching. Furthermore, consequences affirm that teachers do not only explain new words, but also they check whether they are completely retained or not by pupils. The most useful technique that teachers use when presenting new words is introducing them in a context.

Section Three: Working Memory-Based Exercises

a. Total Physical Response Approach and Vocabulary Teaching

Item 08: What do you know about Total Physical Response approach?

The aim of this question is to know the perception of each teacher about Total Physical Response approach, and their answers are (1) the total physical response is a technique which the teacher uses to make the lesson easy for pupils, (2) it is the use of movements and gestures in teaching a language, lastly (3) the other teacher claims that it is the coordination of language and physical movements.

Item 09: The teacher must select a certain amount of words to make a list so that learners can memorize them.

Table2.1.8: The Teachers' Opinion about Selecting amount of Words.

Options	Number	Percentage
Strongly agree	03	100%
Agree	/	/
Disagree	/	/
Strongly disagree	/	/
Total	03	100%

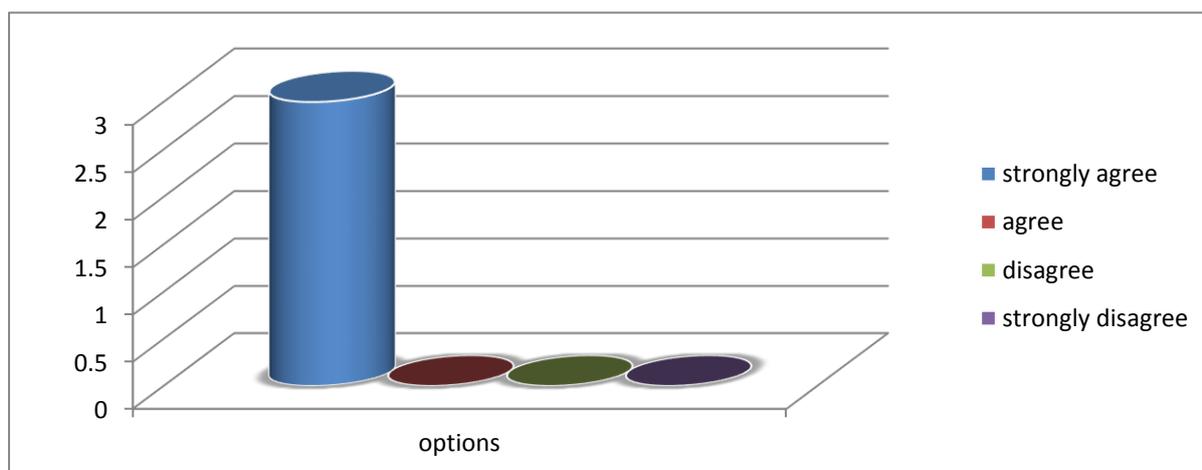


Figure2.1.12 The teachers' Opinion about Selecting amount of Words.

As it is indicated in the table and the graph above, all the teacher (100%) were strongly agree that the teacher must select certain amount of words to make a list so that the learners can memorize them. as result, this means that the teachers are aware of the importance of the selecting the words making a list to improve the pupils acquisition of new words.

Item 10: A second language can be learned in the same way as the first – through the same natural processes.

Table2.1.9: The Teachers' Opinion about the Way of Learning Second Language..

Options	Number	Percentage
Strongly agree	0	0%
Agree	01	33.33%
Disagree	0	0%
Strongly disagree	02	66.66%
Total	03	100%

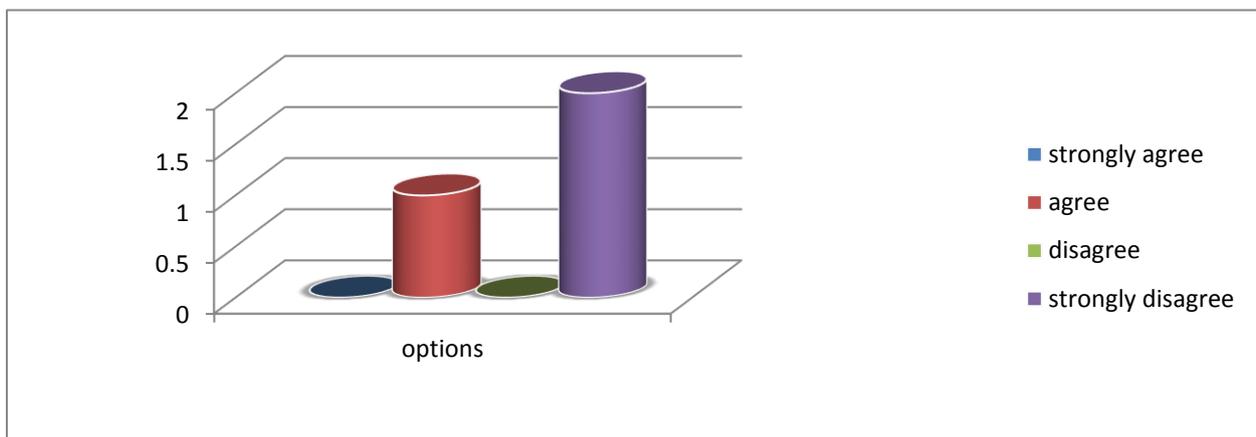


Figure2.1.13 the Teachers' Opinion about the Way of Learning Second Language.

In this question the teachers are asked if the second language can learned in the same way as the first – through the same natural processes, and as it is indicated in the table and the graph above 33.33% agree with this idea , while 66.66% from them are strongly disagree with it .So we see that

the majority of teachers think that the second language cannot be learned in the same way as the first .We deduce that each language has it principals and teaching strategies .

Item 11: Requiring pupils to respond to commands, which in turn require physical movements, is effective technique to retain words.

Table2.1.10 Teacher’s Opinion about Physical Movements

Options	Number	Percentage
Strongly agree	0	0%
Agree	03	100%
Disagree	0	0%
Strongly disagree	0	0%
Total	03	100%

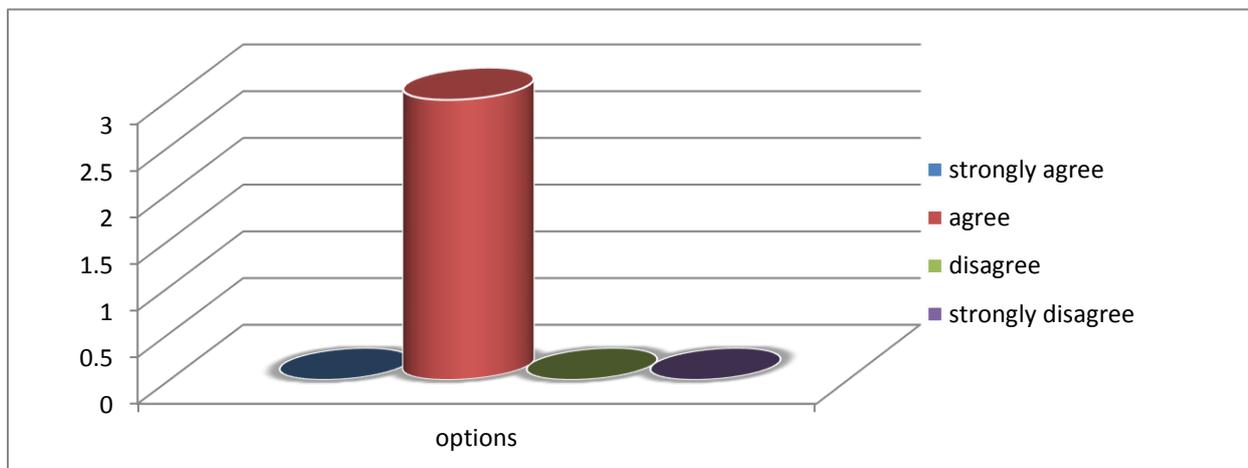


Figure2.1.14 Teacher’s Opinion about Physical Movements

The aim of this question is to know the effectiveness of physical movement and gestures to retention words .And as it is shown in the table above and the graph that follows all of the teachers (3) corresponding to (100%) agree to this method .this claimed that the teachers are aware to the importance of gestures and physical movement in teaching and retention of new words.

Item 12: The pupils’ comprehension may be enhanced through the use of mime role plays.

Table 2.1.11: The effectiveness of Role Plays

Options	Number	Percentage
Strongly agree	01	33.33%
Agree	02	66.66%
Disagree	0	0%
Strongly disagree	0	0%
Total	03	100%

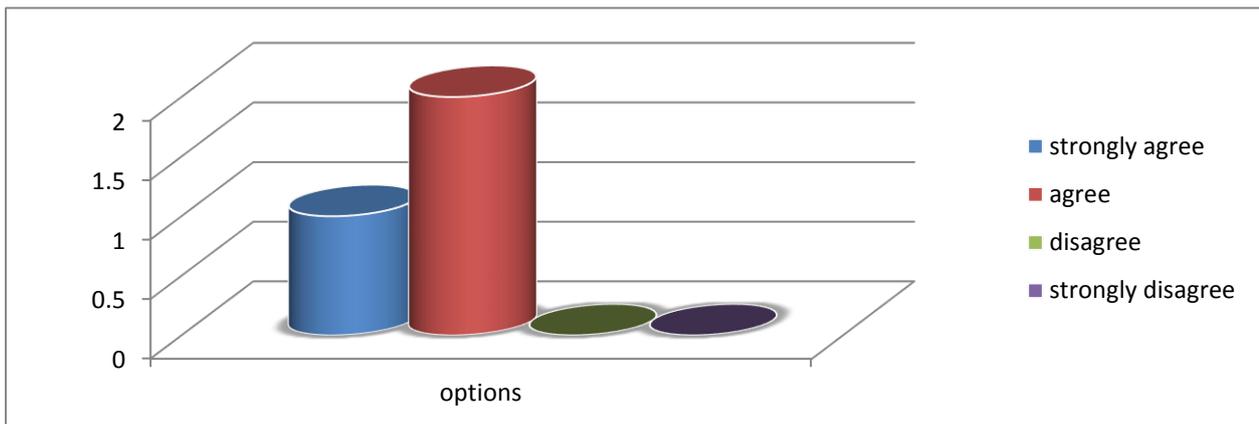


Figure 2.1.15 The effectiveness of Role Plays

In this question the teachers are asked if they agree that the pupils’ comprehension can be enhanced through the use of mime role plays. Also, as it indicated in the table above and the graph that follows one teacher (1) corresponding to 33.33% agree with the idea and the rest of them (2) corresponding 66.66% strongly agree with it. We deduce that the roles plays have are so effective for acquiring new vocabulary items and through practice learners will improve their level and their familiarity of new words.

Item 13: It can be a successful and fun way of changing the dynamics of a lesson used in conjunction with other methods and techniques.

Table2.1.12 the Teacher s' Opinion about the Changing of Dynamics of the Lesson

Options	Number	Percentage
Strongly agree	01	33.33%
Agree	02	66.66%
Disagree	0	0%
Strongly disagree	0	0%
Total	03	100%

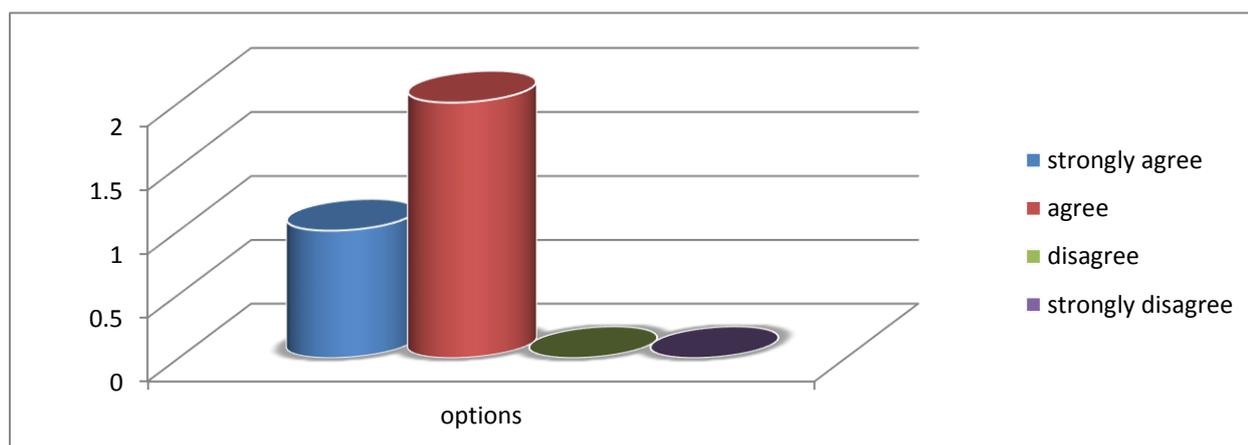


Figure2.1.16 the Teacher s' Opinion about the Changing of Dynamics of the Lesson

The aim of this question the teachers were asked if they agree that changing the dynamics of the lesson used in conjunction with other methods and techniques can be successful and a funny way. As it shown in the table above and table that follows one teacher (1) corresponding to 33.33% is strongly agree with this method and the rest of the teachers (2) corresponding to 66.66% agree to it too, and that's means that the teachers are conscious about the benefits and the advantages of changing the dynamics of the lesson used in conjunction with other methods and technique is a successful ,effective and funny way that helps pupils to learn and remember a new words and improve their vocabulary acquisition .

b)” Repeat after me” protocol and Vocabulary Teaching

Item 14: What do you know about the use of repetition in relation to teach vocabulary?

The teachers are asked in this question about the effectiveness of method “repeat after me” and its relation to vocabulary. All the teachers’ answers support to use this technique; for instance teacher (1) declares that when pupils repeat what they have listing (group or individual) they work more and understand. Thus, the teacher (2) says that repetition is one of steps of the lesson; it is a technique that helps pupils to memorize words (new vocabulary) and improves their fluency. Finally, the third teacher (3) claims that repetition is the method used to improve precision accuracy of measurement; it is a memorable strategy to enhance learning.

It seems from the answers of the teachers that the repeat after me method is a memorable strategy to enhance pupils’ vocabulary learning and improve their fluency.

Item 15: Repeating words as much as possible helps clarify pronunciation and provides opportunities to transfer words from working memory to long-term memory.

Table 2.1.13 The effectiveness of Repetition Method on Pronunciation.

Options	Number	Percentage
Strongly agree	02	66.66%
Agree	01	33.33%
Disagree	0	0%
Strongly disagree	0	0%
Total	03	100%

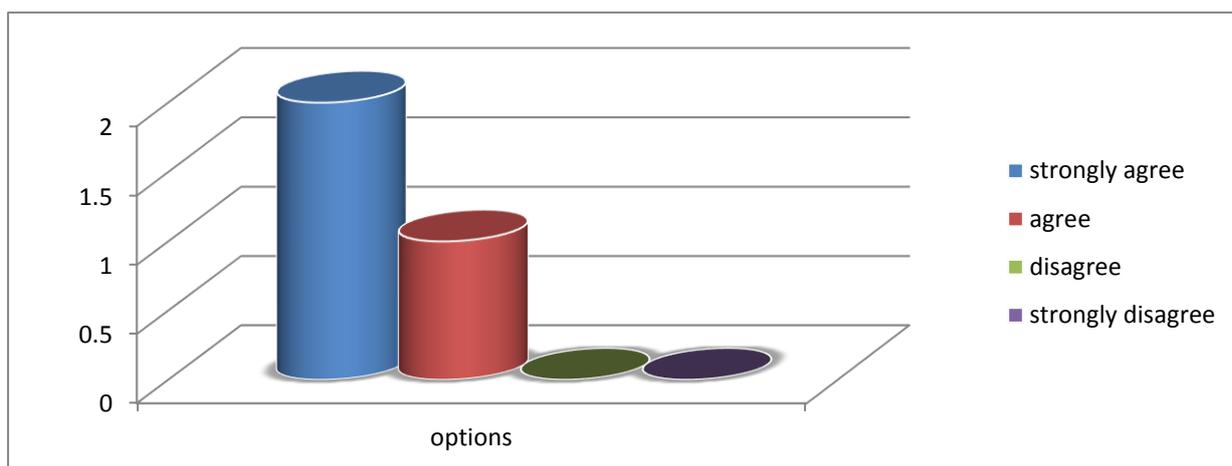


Figure2.1.17 The effectiveness of Repetition Method on Pronunciation.

In this question the teachers are asked if they agree that repeating words helps clarify pronunciation and provide opportunities to transfer words from working memory to long-term memory. As it indicated in table above and the table that follows one teacher (1) corresponding to (33.33%) agree with that idea, and the rest of teachers (2) consequent to (66.66%) strongly agree with it too. So we deduce that repetition is one of the effective methods in teaching vocabulary that aids the pupils to memorize.

Item 16: Repetition will help embed the words into the pupils' memory.

Table2.1.14: The effectiveness of Repetition method on Embeds the Word.

Options	Number	Percentage
Strongly agree	03	100%
Agree	0	0%
Disagree	0	0%
Strongly disagree	0	0%
Total	03	100%

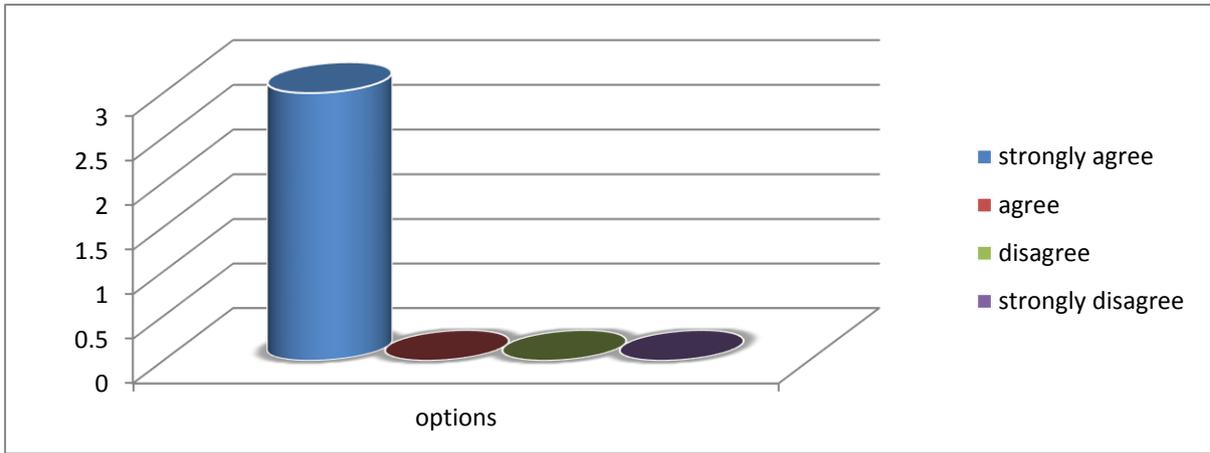


Figure2.1.18 The effectiveness of Repetition Method on Embeds the Word.

In this question the teachers were asked if the repetition method helps to embed the words from the pupils memory .As it shown in the table above and the graph that follows all the teachers (3) corresponding to (100%) are strongly agree. We can deduce that are aware and give much importance to repetition method in order to help pupils to memorize their vocabulary.

Item 17: Learning a big amount of vocabulary can only be obtained by repeating individual words.

Table2.1.15 The effectiveness of Repetition Individual Words on Learning Vocabulary.

Options	Number	Percentage
Strongly agree	01	33.33%
Agree	0	0%
Disagree	02	66.66%
Strongly disagree	0	0%
Total	03	100%

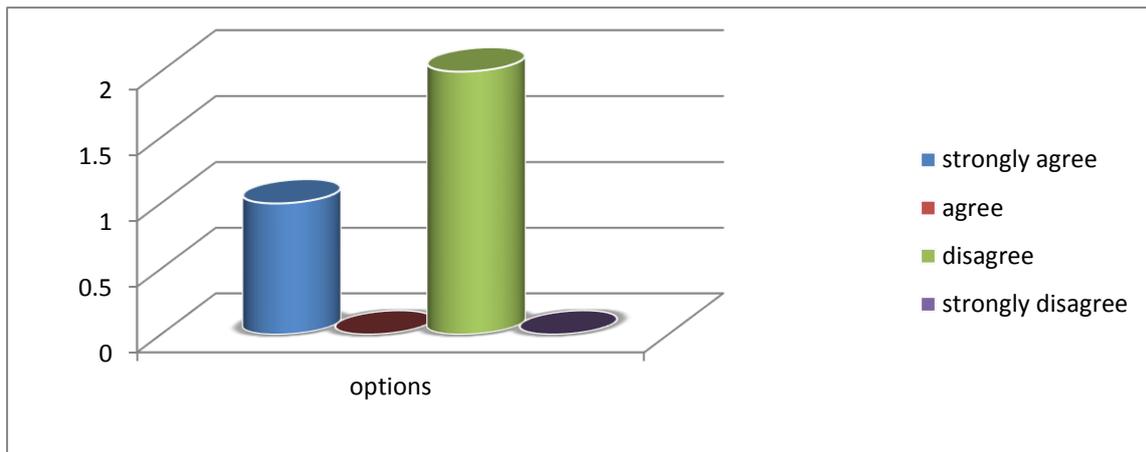


Figure2.1.19 The effectiveness of Repetition Individual Words on Learning Vocabulary.

In this question the teachers are asked if learning a big amount of vocabulary can only be obtained by repeating individual words .As it indicated in the table above and the graph that follows one teacher (1) corresponding to (33.33%) is strongly agree ,while the majority of teachers (2) corresponding to (66.66%) disagree. And that is mean that learning a big amount of vocabulary can be obtained not just by repeating words but there are other methods and techniques that help pupils to acquire new vocabulary and learn a big amount new words as much they can .

Item 18: Repetition can be a valuable tool in the EFL classroom as many of pupils are busy with their daily lives and may have limited exposure to English when not in class.

Table2.1.16 The effectiveness of Repetition on EFL Classroom.

Options	Number	Percentage
Strongly agree	0	0%
Agree	03	100%
Disagree	0	0%
Strongly disagree	0	0%
Total	03	100%

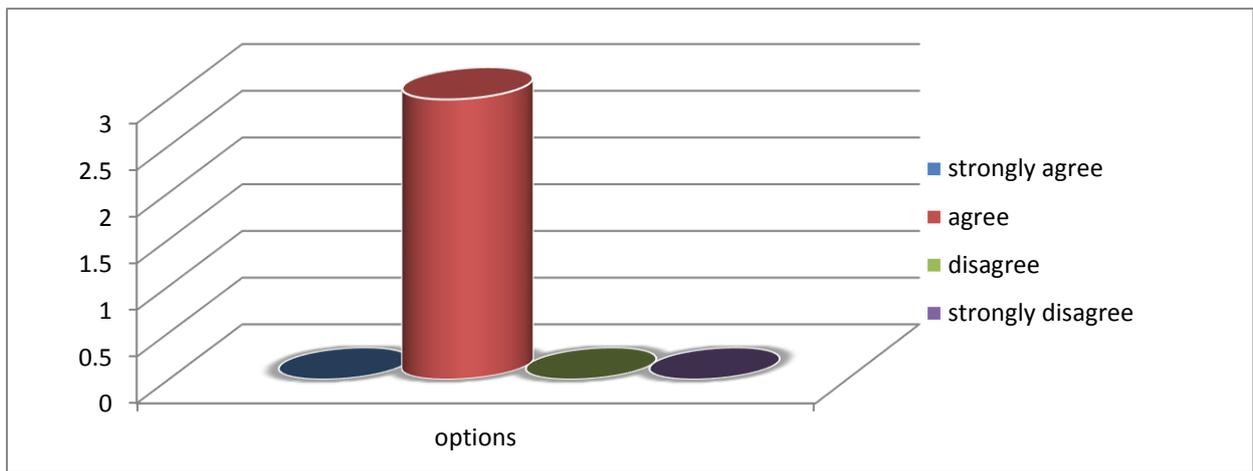


Figure2.1.20 The effectiveness of Repetition on EFL classroom.

In this question the teachers were asked if Repetition can be a valuable tool in the EFL classroom as many of pupils are busy with their daily lives and may have limited exposure to English when not in class. As it indicated in the table above and the graph that follows all the teachers (3) corresponding to 100% agree with this idea. And that ensures that the repetition method is an effective and a useful tool that helps pupils to memorize the words they learned in the classroom.

C. Colored papers and Vocabulary Teaching

Item 19: What do you know about the use of colored papers in teaching?

In this question the teachers were asked about the use of colored papers in teaching. Teachers in this question are all aware about the use of colors to facilitate the teaching tasks. According to the teacher (1) the use of colors attract pupils' attention, showing the most important points (colored points are the points that the pupils should focus on them). In addition, other teacher is argue with the previous one and she point out that coloring the most important points that pupils need to focus on them help her pupils to remember the essential vocabulary.

It appears from the answers of teachers that most of them agree with the point that the use of colored papers in teaching can be effective method to attract the pupils' attention to the points and words they need to focus on them.

Item 20: Color is useful in learning and revising, as well as making students and teachers aware of the way they approach certain tasks.

Table2.1.17 The effectiveness of Colors on Learning and Revising.

Options	Number	Percentage
Strongly agree	03	100%
Agree	0	0%
Disagree	0	0%
Strongly disagree	0	0%
Total	03	100%

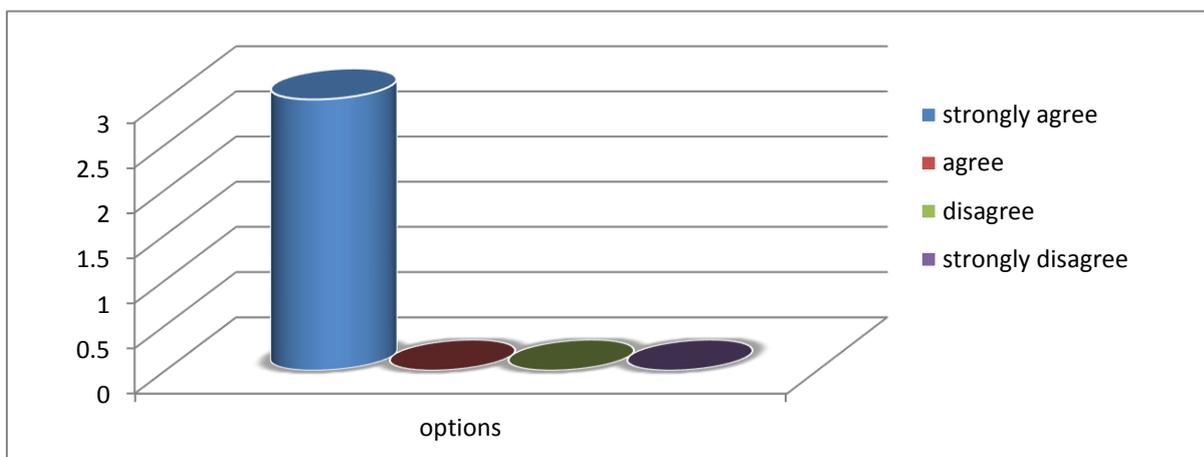


Figure2.1.21 The effectiveness of Colors on Learning and Revising.

In this question the teachers were asked if the Color is useful in learning and revising, as well as making students and teachers aware of the way they approach certain task. As it indicated in the table above and the graph that follows all the teachers (3) corresponding to (100%) are strongly

agree with this idea. So we deduce that the use of colors has performance to help pupils in to learn and revise and it is also makes the teachers conscious of manner they approach certain task.

Item 21: Coloring words helps to concentrate on the task and extends the time and attention students give to each word to be learnt.

Table2.1.18 The effectiveness of Coloring on Pupils' Concentration.

Options	Number	Percentage
Strongly agree	03	100%
Agree	0	0%
Disagree	0	0%
Strongly disagree	0	0%
total	03	100%

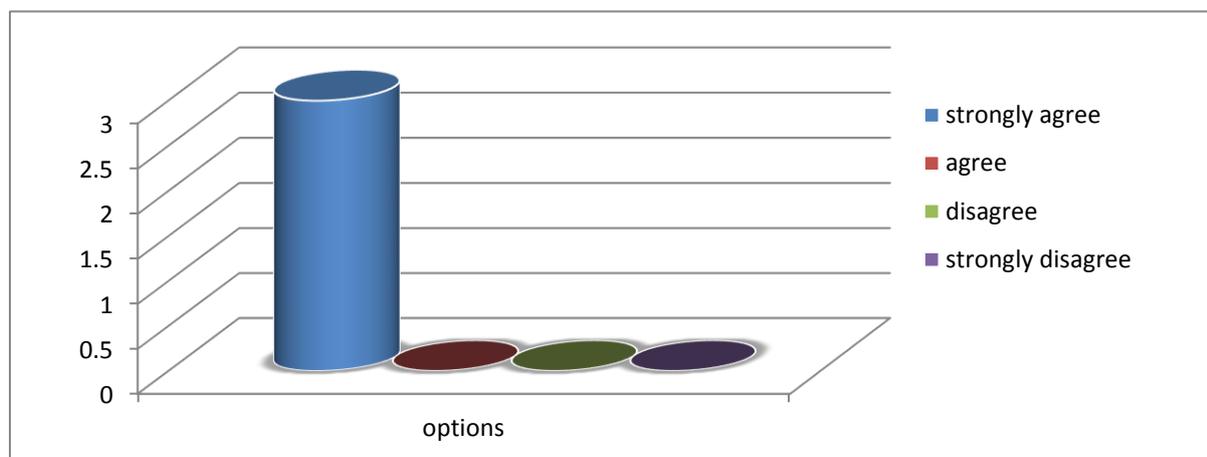


Figure2.1.22 The effectiveness of Coloring on pupils' Concentration.

The aim of this question is to ask teachers if coloring words helps to concentrate on the task and extends the time and attention students give to each word to be learnt. As it indicated in the table above and the graph that follows all the teachers (3) corresponding to (100%) are strongly agree with this idea. And that is means that coloring words helps to increase their concentration

level on what they are learning, extending the time and attract the student attention to learn new words and acquire new vocabulary.

Item 22: Do you think that making colored drawings or symbols for words or grammatical categories to be used in the classroom is wasting of the time?

Table2.1.19: The teachers' Opinion about the Drawing and Time Expended.

Options	Number	Percentage
Strongly agree	0	0%
Agree	01	33.33%
Disagree	0	0%
Strongly disagree	02	66.66%
total	03	100%

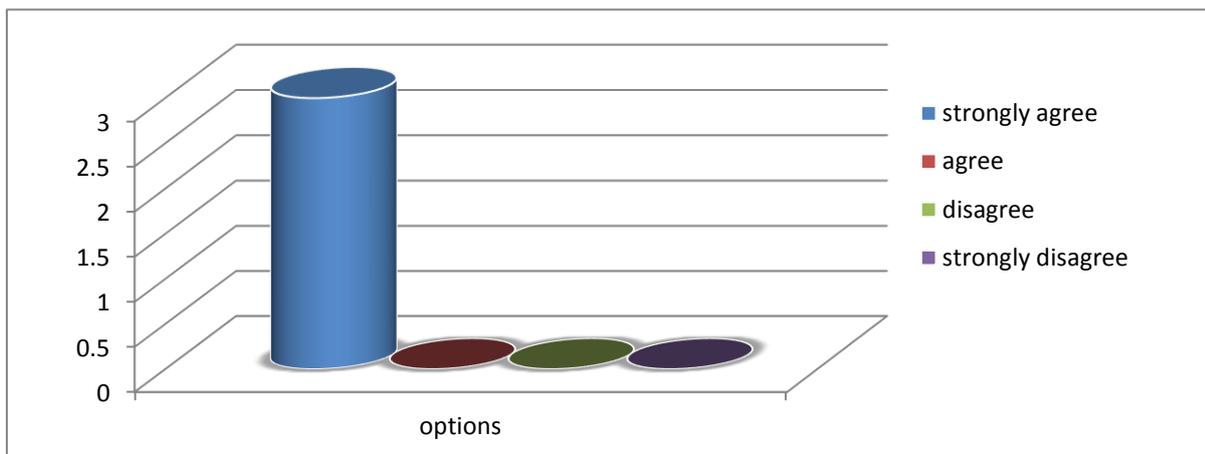


Figure2.1.23 the Teachers' Opinion about the Drawing and time Expended.

The aim of this question is to ask teachers if making colored drawings or symbols for words or grammatical categories to be used in the classroom is wasting of the time. As it indicated in the table above and the graph that follows one teacher (1) corresponding to 33.33% agree with this thought while the rest of the teachers (2) corresponding to 66.66% are strongly disagree. And that can be refer and depend to each teacher and his techniques and strategies in teaching.

Item 23: Developing new ideas, drawing pictures, and playing with words make studying a pleasure rather than as a duty.

Table 2.1.20 teachers' Opinion about Drawing Pictures.

Options	Number	Percentage
Strongly agree	02	66.66%
Agree	01	33.33%
Disagree	0	0%
Strongly disagree	0	0%
total	03	100%

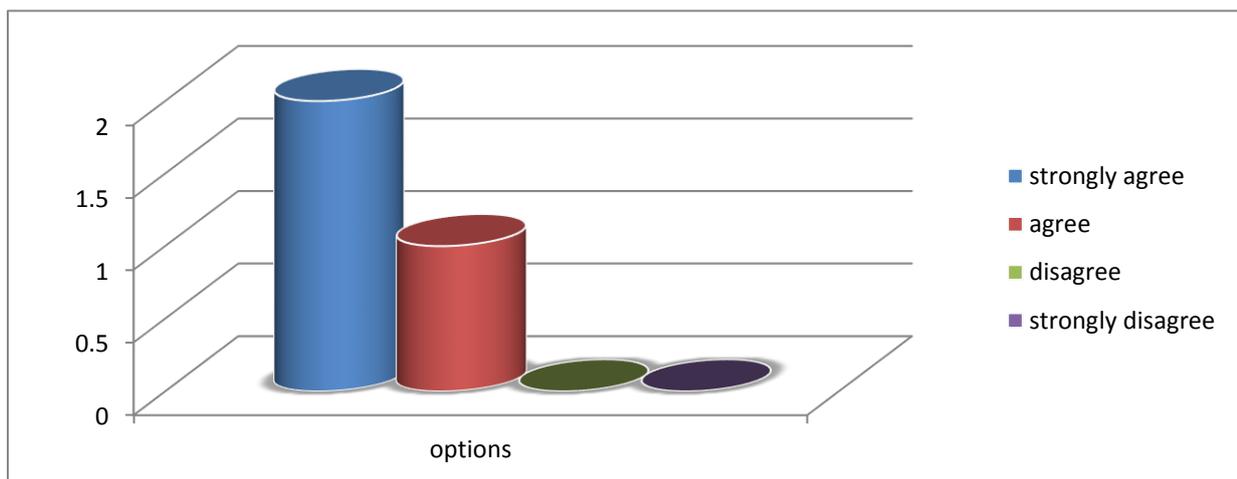


Figure 2.1.24 Teachers' Opinion about Drawing Pictures.

In this question the teachers were asked if developing new ideas, drawing pictures, and playing with words make studying a pleasure rather than as a duty. As it indicated in the table above and the graph that follows one teacher (1) corresponding to 33.33% agree with this idea and the rest of the teachers (2) corresponding to 66.66% are strongly agree. So we infer that increasing the vocabulary acquisition needs more entertainment to make teaching and learning a pleasure rather than as a duty.

2.1.2 Questionnaire for Pupils

The questionnaire is administrated to forty (40) pupils of first year at Rouina Mohamed Ghantar Middle school Ouled Djellal-Biskra. The selection of the sample was based on 25% from the population of 165 pupils. Moreover, this study attempts to investigate the major causes which lead vocabulary difficulties to retain and occur. Also it attempts to suggest some recommendations for pupils to raise their retention of vocabulary in using such developed practices and working memory techniques in particular. The administration of pupils' questionnaire took just one day, in less than one hour we received the answers from pupils unlike the one of teachers.

The following questionnaire was based on the taxonomy of Schmitt (1997). It is semi-structured containing twenty items divided into three sections, starting with a set of questions concerning general background of pupils from question one (1) to question (2), then section two includes their beliefs about learning vocabulary in general it is from the question three to six and the last sections is devoted to vocabulary learning strategies employed by their teacher. In addition, that last section includes items to check pupils' opinion toward (a) using repetition, (b) employing the colors, and finally (c) the use of movements. The question includes in the questionnaire are, multiple choice questions in which respondents are asked to select the best answer out of the choices given (question 07), asking for frequency use with: "agree" "disagree" "use" and "not use" and open-ended questions where pupils were required to give their own views on vocabulary learning and freely express their ideas without relying on fixed options.

2.1.2.1 Analysis of Pupils' Questionnaire

Section One: General Information

Table 2.1.21 Pupils' Gender

Item	Number		Percentage	
	girls	boys	girls	boys
Gender	24	16	60%	40%
	Total		100%	

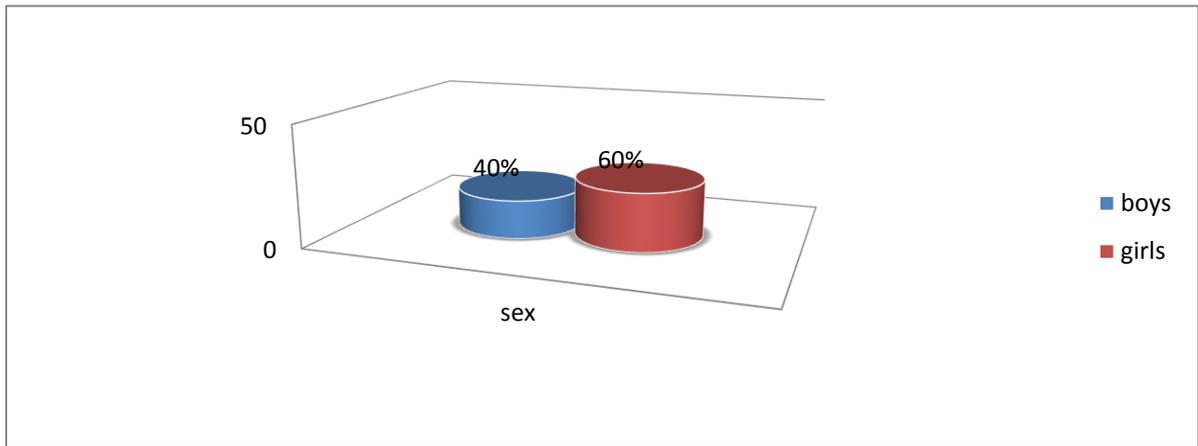


Figure2.1.25 Pupils' Gender

The table and the graph above show the gender of target group of 40 pupils from the first year middle school. The number of females is more than the number of males, where we find that the female number of 24 girls (60%) while the number of males 16 boys (40%). This result will not have a great influence on the study because we are focusing on learners' answers to the questionnaire more than their gender.

Item 02: Pupils' Age

Table 2.1.22 Pupils' Age

Item	Number		Percentage	
	11-12	13-14	11-12	13-14
Age	35	5	87.5%	12.5%
Total	40		100%	

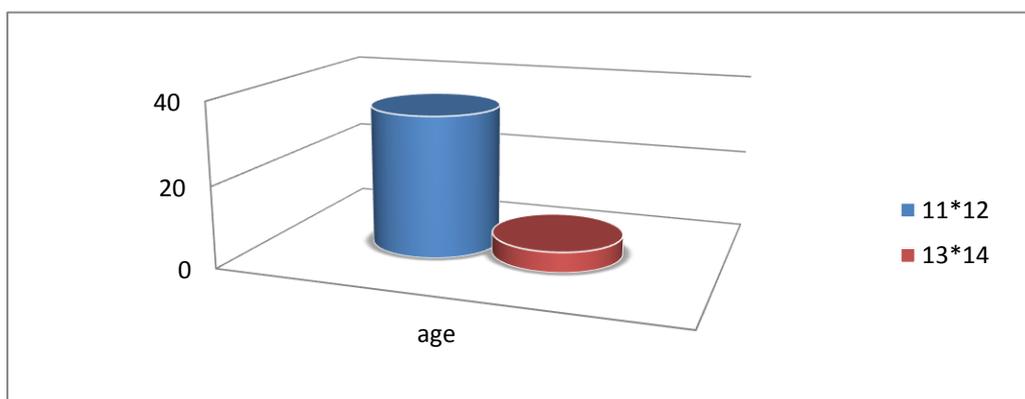


Figure2.1.26 Pupils' Age

Note that the table through the category of respondents ranged in age from 11 to 14 years. We find that the number of pupils aged eleven (11) to twelve (12) years is 30 pupils 87.5%, while the number of remaining five (5) pupils 12.5% ages 13 to 14 years old.

Section Two: Vocabulary Learning

Item 03: Do you like learning vocabulary?

Table2.1.23: Pupils' Opinions about Learning Vocabulary

Item	Number	Percentage
Yes	38	95%
No	2	5%
Total	40	100%

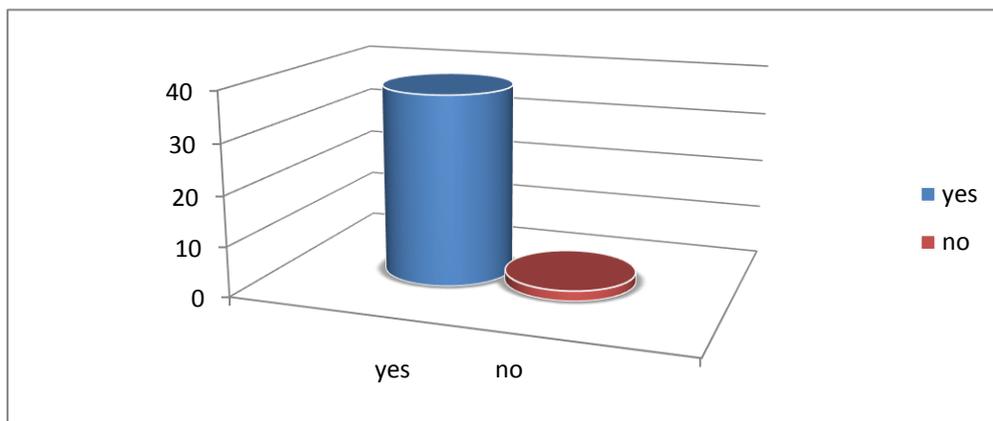


Figure2.1.27 Pupils' Opinions about Learning Vocabulary

In this question, in which we aim to understand pupil s' preferences and their desire to learn the vocabulary of English, we found that a large proportion of pupils (38) by 95% pupil s have a desire to learn vocabulary. While there are (2) pupils who have shown their unwillingness to learn. Later we will try to mention possible reasons that may explain this reluctance or aversion to English.

Item 04: Do you understand the meaning of vocabulary?

Table2.1.24 Understanding the Meaning of Vocabulary

Item	Number	Percentage
Yes	25	62.5%
No	15	37.5%
Total	40	100%

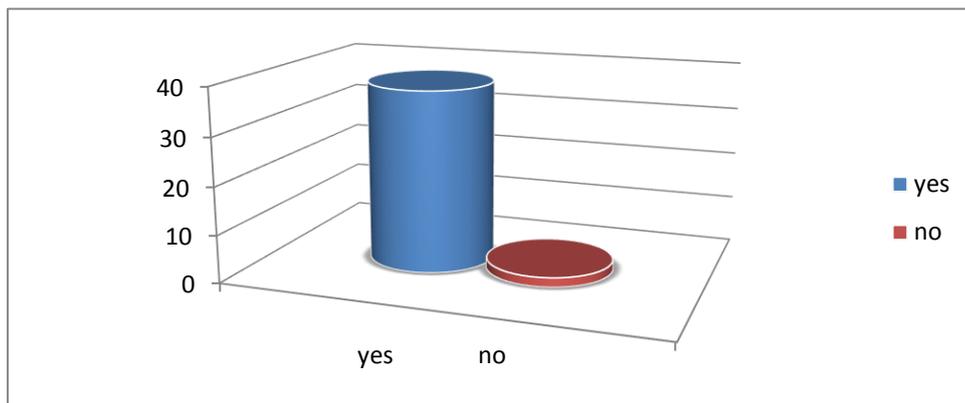


Figure2.1.28 Understanding the Meaning of Vocabulary

The objective behind this question is to check whether the pupils comprehend the meaning of the words or not .The graph illustrates that 62.5% of the estimated 25 pupils understand the meaning of the English vocabulary that they receive in the lesson. Fifteen pupils 37.5% answered that they do not understand English words. Some of the pupils justify their answers by declaring that they review the words well at home. Also, they claim that the teacher writes the same exercise in the exam in the sense that they understand in the class. The pupils who have difficulty to retain and understand words state that it refers to the lack of focus, the impact of anxiety ,and the complexity of the lessons.

Item05: Are you able to retain the word correctly during an activity or exam?

Table2.1.25 Pupils' Ability to Retain Words

Item	Number	Percentage
Yes	26	65%
No	14	35%
Total	40	100%

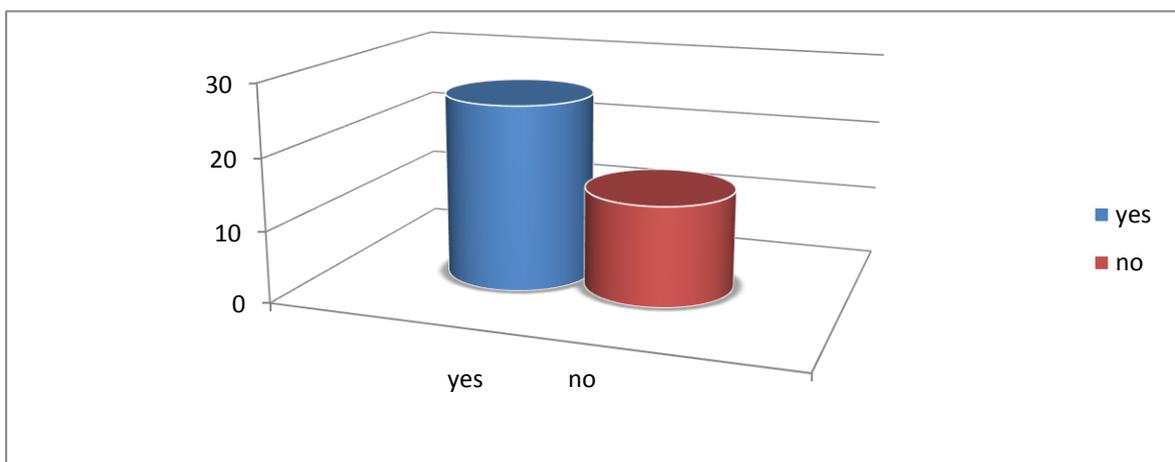


Figure2.1.29 Pupils' Ability to Retain Words

The pupils in this question are asked about their ability to remember the English words they received from their teacher in the English language classes and retrieving them during solving problems or passing the tests. The answers were as follows: Twenty-six (26) learners answered yes (65%), while (14) pupils (35%) did not. Consequently, those results obtained by teachers' negative feedback, the impact of anxiety on their performance, and the difficulties that they may face to remember all lesson content. In other side, the learners with high ability to remember words may follow a set of techniques to embed the information. The level of retaining words among participants was justified by the majority of them who declared that they follow the repetition method (oral and writing).

Item 06: How do you want your teacher to teach you vocabulary?

Table 2.1.26 Pupils' Opinion about the Way of Teaching Vocabulary

Suggestions	Number	Percentage
The use of translation	20	50%
The use of pictures	12	30%
Providing the definition	8	20%
Total	40	100%

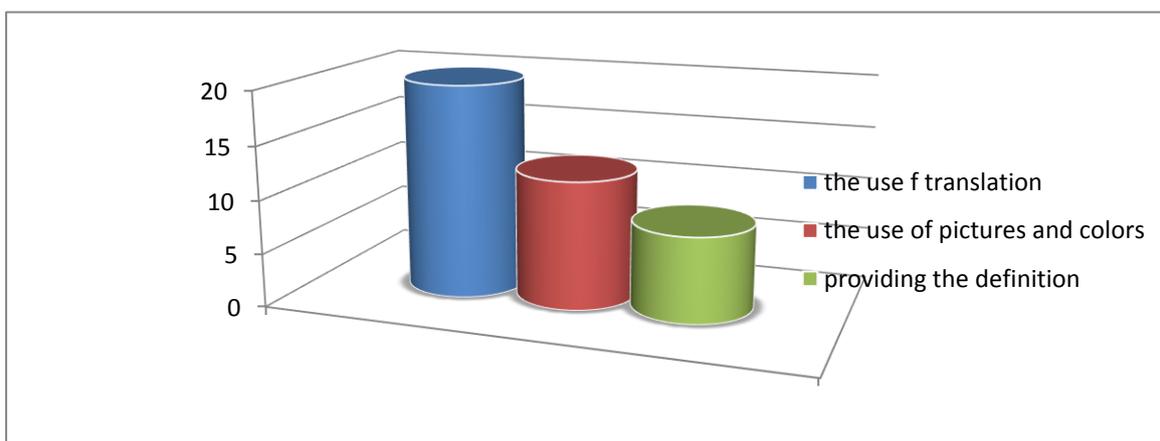


Figure 2.1.30 Pupils' Opinion about the Way of Teaching Vocabulary

The aim of this question is to investigate the pupils' interests and preferences about the way of teaching vocabulary. The majority of the pupils prefer to use Arabic language to present new words. Twelve of participants like to be taught through employing of pictures and colors; they declare that when they see such images even in textbook they will concentrate much better. The rest 8% of pupils claim that providing the definition of the new words could be effective way to teach vocabulary.

Section three: Working Memory-based Exercises

a) Total physical response approach and vocabulary learning

Item 07: Which strategy helps you retain the vocabulary?

Table 2.1.27: the Strategies that Help to Retain Vocabulary

Suggestions	Number	Percentage
Using songs	2	5%
Repetition	15	37.5%
Using the pictures and colors	17	42.5%
Using it in conversation	3	7.5%
Educational games	3	7.5%
Total	40	100%

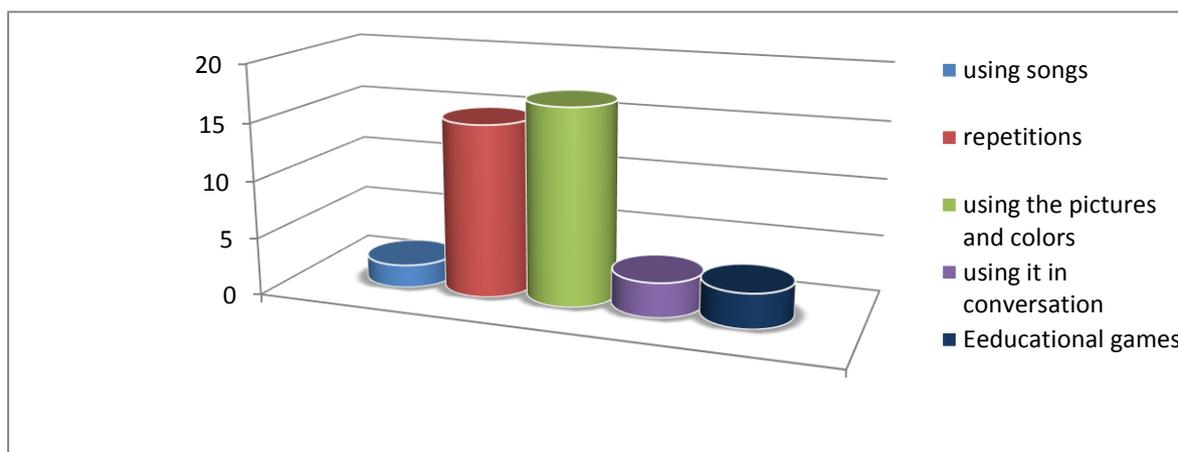


Figure2.1.31 the Strategies that help to Retain Vocabulary

In this question we have identified suggestions or ways to help pupils recover and retrieve English words and vocabulary that they have learned previously in 5 main practices. These are the more common ways to remember. This question aims to discover which technique learners think is the most important to retain words. We note from the table that pupils are more inclined to "use pictures and colors" 17 pupils 42.5% said that they prefer this method to help them remember the vocabulary more. Whereas it obvious that the techniques of "the use of words in the dialogue "and

“educational games “as two ways to remember have the same percentage of choice of pupils, where they reached 7.5% for both. Finally " use of songs "as the last technique preferred by 2 of the pupils only 5% of the total number of pupils studied.

Item 08: Does the teacher make some movements and gestures to facilitate understanding?

Table2.1.28 the Teachers’ Use of Gestures and Movements

Item	Number	Percentage
Use	5	12.5%
Not use	35	87.5%
Total	40	100%

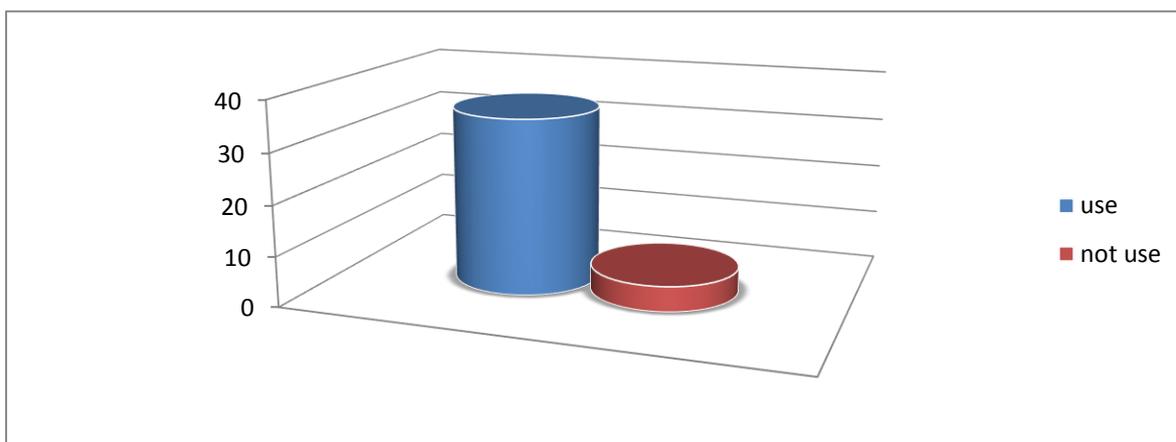


Figure2.1.32 the Teachers’ Use of Gestures and Movements

In this question, a small number of pupils, estimated at 5 pupils 12.5%, denied that the teacher facilitated the understanding of the lessons through gestures and movements. The rest, however, confirmed the number of 35 pupils 87.5% admitted that the teacher followed this method in understanding the lesson and overcoming any difficulty in it. That results emphasizes that one of the techniques which is appropriate for children in learning vocabulary is Total Physical Response (TPR) method. James Asher (<http://www.tpr-world.com>, 1) stated that “use TPR method for new vocabulary and grammar, to help pupils immediately understand the target language in chunks rather than word-by-word. This instant success is absolutely thrilling for pupils”.

Item09: Does the teacher encourage you to participate in dialogues using new vocabulary learned in the lesson?

Table2.1.29 the Use of New Vocabulary in Dialogue

Item	Number	Percentage
Use	34	85%
Not use	6	15%
Total	40	100%

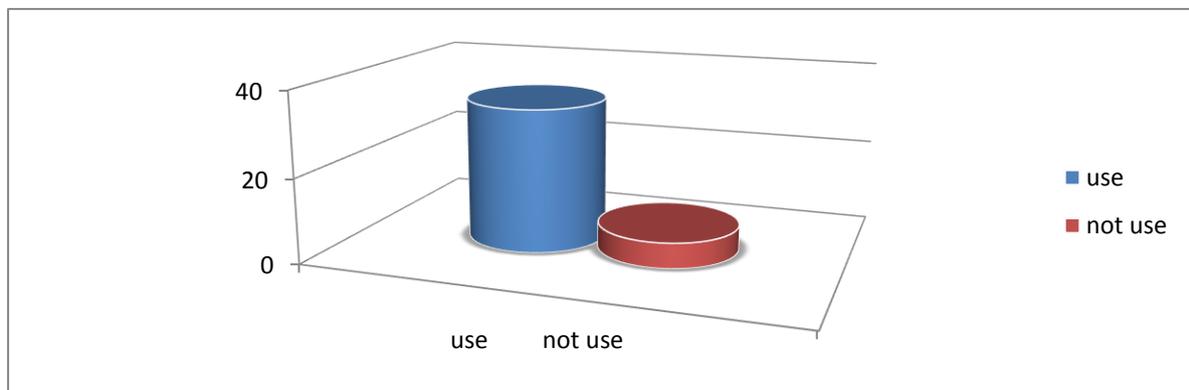


Figure2.1.33 The use of New Vocabulary in Dialogue

The table and the graph above show that most of the 34 pupils (85%) confirm that they are encouraged by their teachers to participate in the dialogues detained in English classes in order to familiarize them with the use of new vocabulary that they knew recently and also to keep them true. While there are six 6 pupil s (15%) denied that.

b) “Repeat after me Protocol” and Vocabulary Learning

Item10: Does the teacher repeat the important words more than once in the lesson?

Table2.1.30: the Repetition of the Important Words

Item	Number	Percentage
Use	38	95%
Not use	02	5%
Total	40	100%

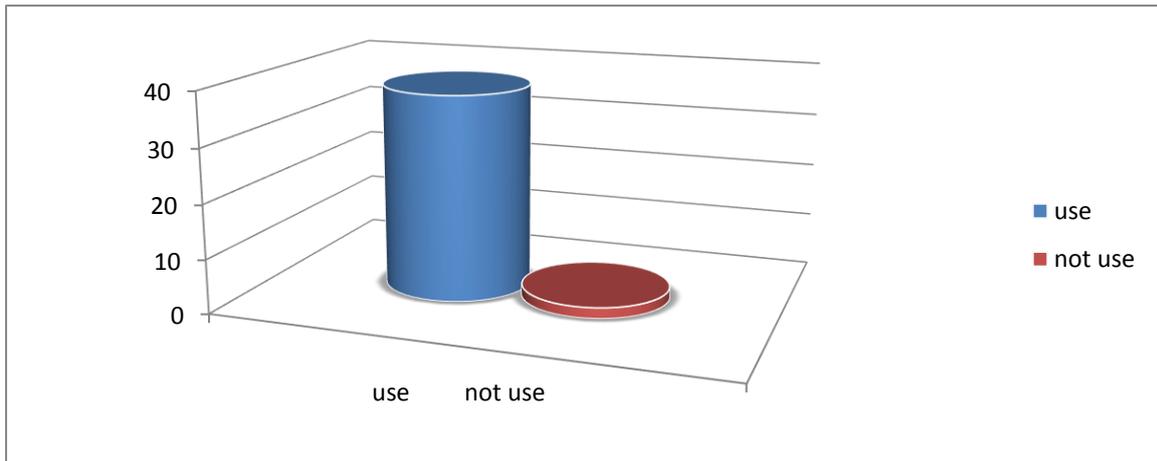


Figure2.1.34 the Repetition of the Important Words

The aim of this question is to highlight one of the most important mechanisms used by teachers to consolidate the words and vocabulary of English, especially the modern ones. Looking at the table above we note that 95% of the pupils' category respondents confirm that the teachers using the technique of "repetition" While the remaining pupils 5% denied that the teacher had used them with such a method.

Item11: Can you decode words better when you repeat them many times with your teacher?

Table2.1.31: the Ability to Decode Words through Repetition

Item	Number	Percentage
Agree	36	90%
disagree	04	10%
Total	40	100%

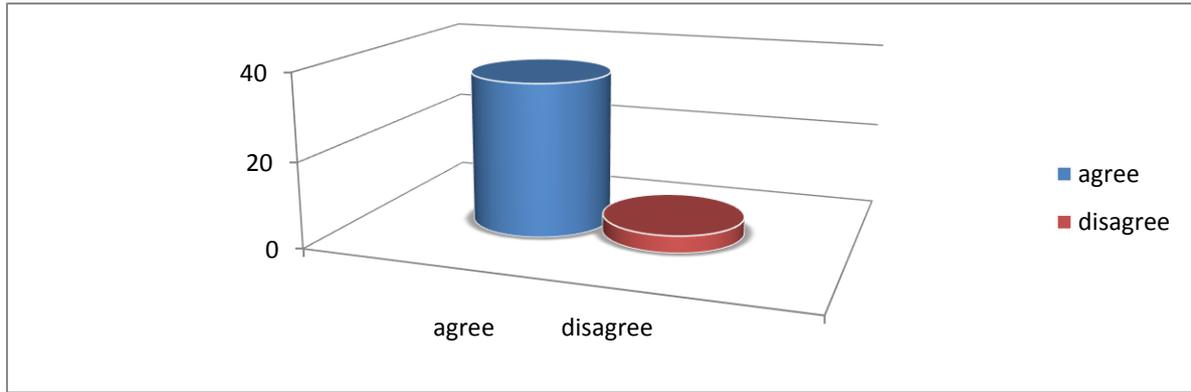


Figure2.1.35 The ability to Decode Words through Repetition

The results of this question show that the number of pupils who rely on repetition as an optimal method of memorizing the words they receive in the English lesson is greater than those who do not depend on it. The first category included 36 pupils (90%) of the total number of pupils and the rest only by (10%).

Item12: Rewriting the words acquired more than once helps you instill them in your mind and easily rewrite those words.

Table2.1.32 Rewriting the Words for Instilling

Item	Number	Percentage
Agree	36	90%
disagree	04	10%
Total	40	100%

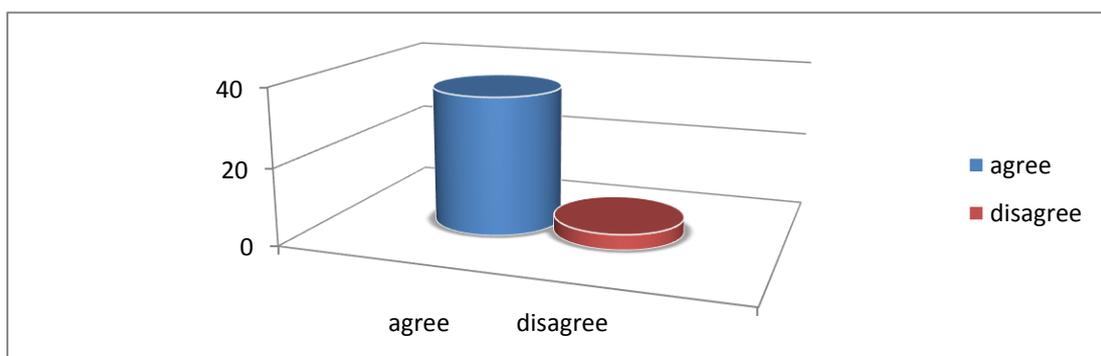


Figure2.1.36 Rewriting the words for Instilling

After we have dealt with the last questions to the subject of information consolidation of pupils by repetition verbally. In this question we have deliberately known the opinion of pupils in the preservation and consolidation of words and information gained by rewriting several times. We have reached the conclusion that 36 pupils 90% agree that rewriting the words acquired more than once in the English lesson contributes to memorizing them and thus making them easier to re-write them again, while the other 4 pupils 10% do not agree with this method and consider it useless to consolidate words in their minds.

Item13: Does the collective repetition of vocabulary help you to pronounce properly?

Table2.1.33: the Use of collective Repetition in Pronunciation

Item	Number	Percentage
Agree	37	92.5%
disagree	3	7.5%
Total	40	100%

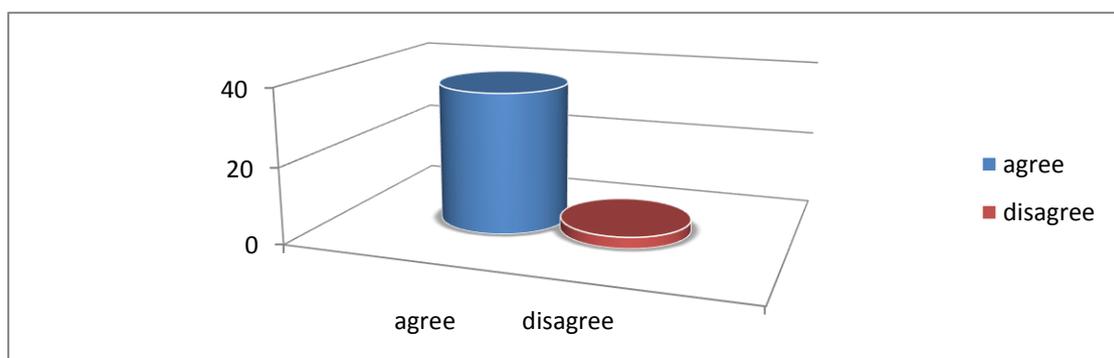


Figure2.1.37 The Use of Collective Repetition in Pronunciation

The results of this question show that the majority of the pupils 37 pupils (92.5%) believe that the repetition of the collective words within the classroom and under the supervision of the teacher helps them to pronounce correctly or incorrectly. While other three (3) learners (7.5%) are disagree.

c) Colored papers and vocabulary learning

Item14: Does your teacher use pictures and colors in his explanation?

Table2.1.34: the Teachers' Use of Colors and Pictures

Item	Number	Percentage
Use	30	75%
Not use	10	25%
Total	40	100%

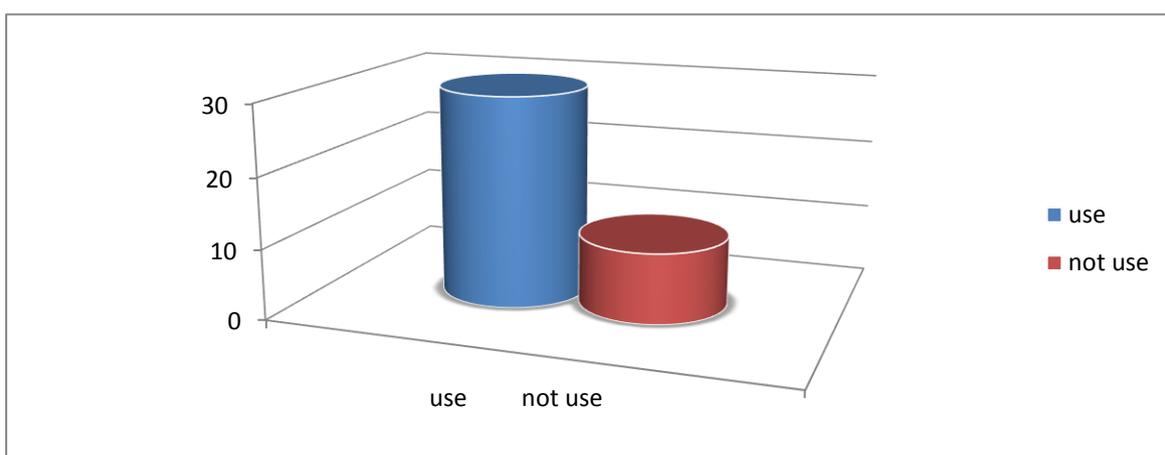


Figure2.1.38 The teachers' Use of colors and Pictures

The pupils in this question have been asked whether the teacher of English language during his presentation of the lesson uses pictures and colors to clarify and explain it to them. The answer we received indicates that 30 pupils 75% assert that the teacher actually follows that method with them. While only ten pupils 25% denied that.

Item15: Does the teacher color or underline important words?

Table2.1.35 the Teachers' Use of underlining and Coloring

Item	Number	Percentage
Use	38	95%
Not use	02	5%
Total	40	100%

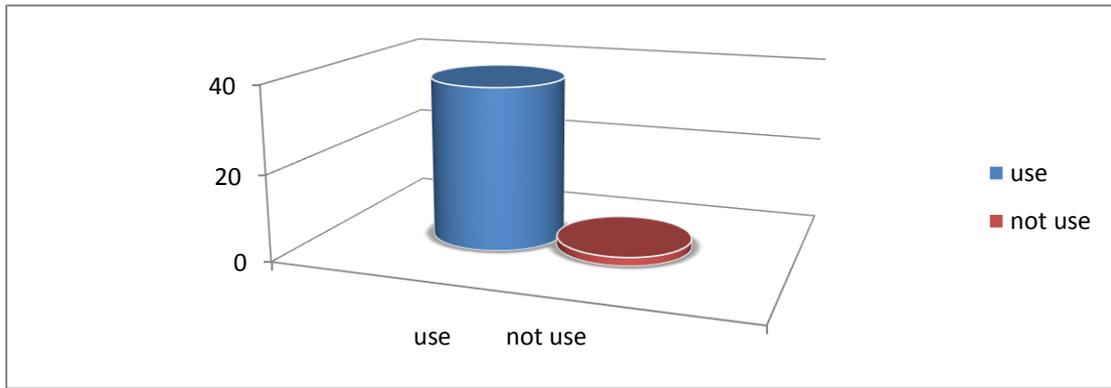


Figure2.1.39 the Teachers' Use of Underlining and Coloring

The results of this question show that all pupils except 2 of them are agreed that the teacher while writing the lesson on the blackboard underline the important words related to the subject by coloring those in different colors. For them that technique helps their focus to distinguish between words and it becomes clearer to the pupil.

Item16: Does the teacher ask you to draw and use colors in your copybook to facilitate your reviewing?

Table2.1.36: the Teachers' Recommendation for Drawing

Item	Number	Percentage
Use	37	92.5%
Not use	3	7.5%
Total	40	100%

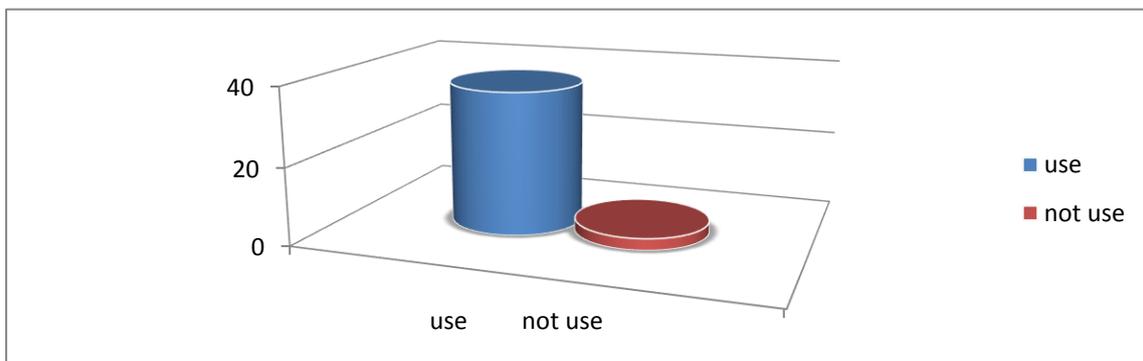


Figure2.1.40 the Teachers' Recommendation for Drawing

The table and the graph note that the teacher of English is devoted to understand his pupils' needs. The objective of this question is to check if he urges them to use the colors on their books to facilitate the process of reviewing the lessons and fit the word correctly, especially during the examination. From the result it is obvious that the majority (92%) of the total number of pupils claim that he did, whereas (7.5%) said that he did not use.

Item17: Does scripting language rules in colorful flashcards help you easily remember?

Table2.1.37 the Use of Colorful Flashcards

Item	Number	Percentage
Agree	32	80%
disagree	08	20%
Total	40	100%

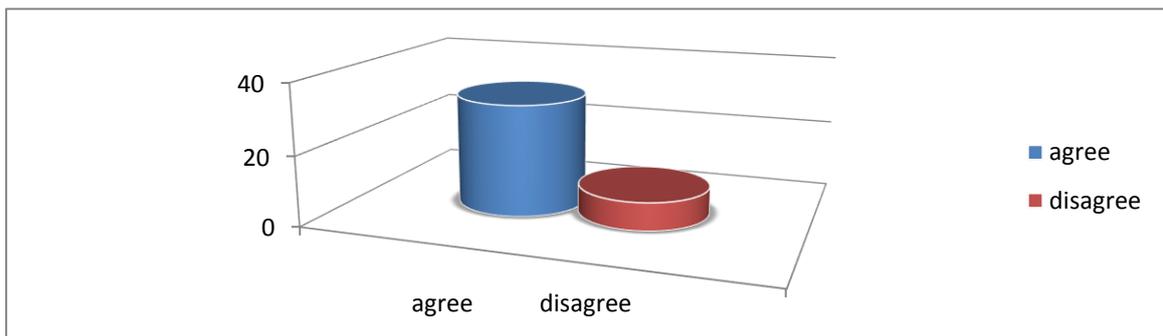


Figure 2.1.41 the Use of Colorful Flashcards

In this question, which aims to focus on one of the most successful techniques used by the teacher in his explanation of the lesson, the use of colorful and flashcards to write the rules on them in order to motivate pupils and push them to focus and achieve a greater understanding of the subject and remember elements. The results show that 32 pupils (80%) said that the teacher already uses them, while the remaining pupils who were 8 pupils, answered no.

Item18: Does the use of colors help you in writing the word correctly?

Table2.1.38 the Effectiveness of Colors on Writing

Item	Number	Percentage
Agree	37	92.5%
disagree	03	7.5%
Total	40	100%

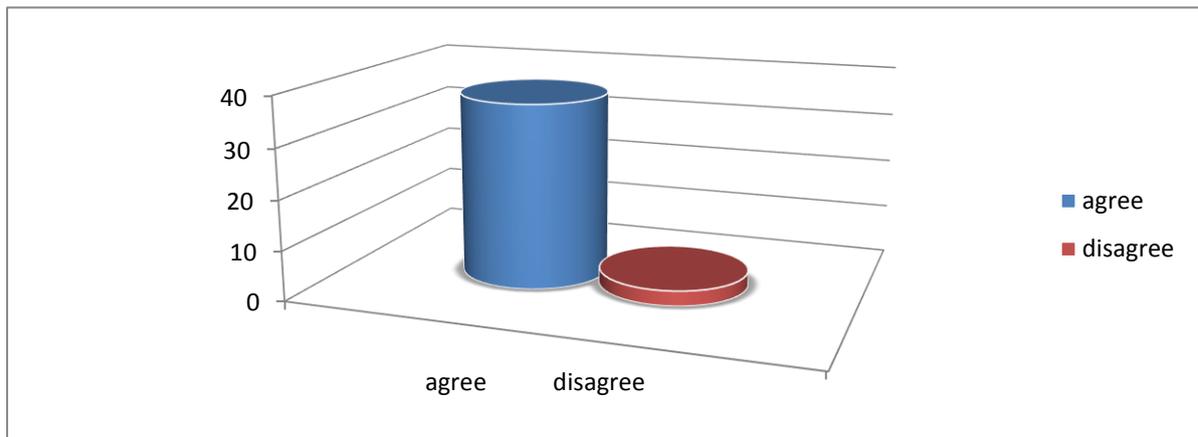


Figure2.1.42 the Effectiveness of using Colors on Writing

The answers to this question show that the pupils' use of different colors while writing their lessons helps them store words and words they learned and then written correctly. The evidence is that (92.5%) of pupils answered the usefulness of this method and benefit and they actually use. In contrast, (7.5%) of pupils seem to disapprove of it because they are ordinary and have not benefited from it.

Item19: Do pictures and colors assist you in retention of words?

Table2.1.39 the Pupils' Opinion about the Use of Pictures for Retention Words

Item	Number	Percentage
Agree	36	90%
disagree	04	10%
Total	40	100%

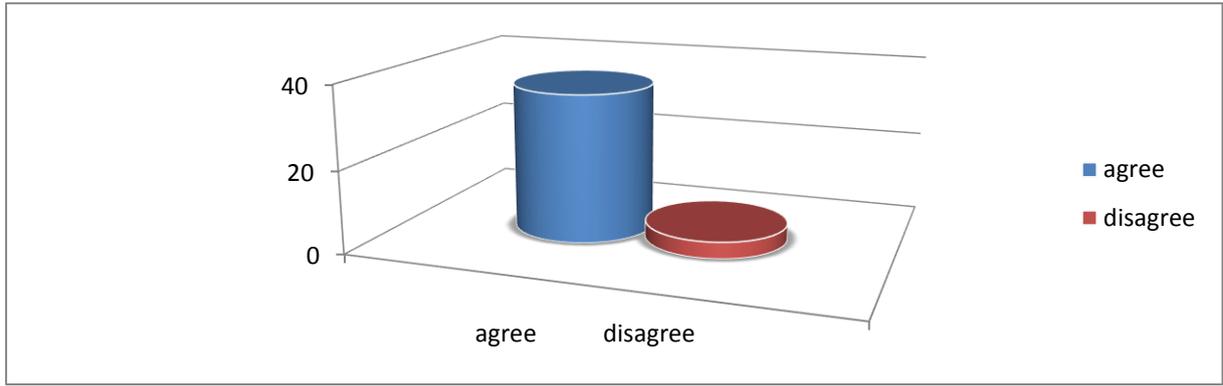


Figure2.1.43 the Pupils' Opinion about the Use of Pictures for Retention Words

The table and the graph above show that a small percentage of pupils (10%) do not agree that the different images and colors have a role in helping them remember the words they received in the English lesson. 90% of the pupils agree that the method has a good impact on them where they remember well the lessons in which the teacher uses colors and pictures perhaps more than other lessons.

Item20: Do drawing and coloring while you review exams facilitate memorizing of information during the exam?

Table2.1.40 the Use of Coloring in Revising Exams

Item	Number	Percentage
Agree	38	95%
disagree	02	5%
Total	40	100%

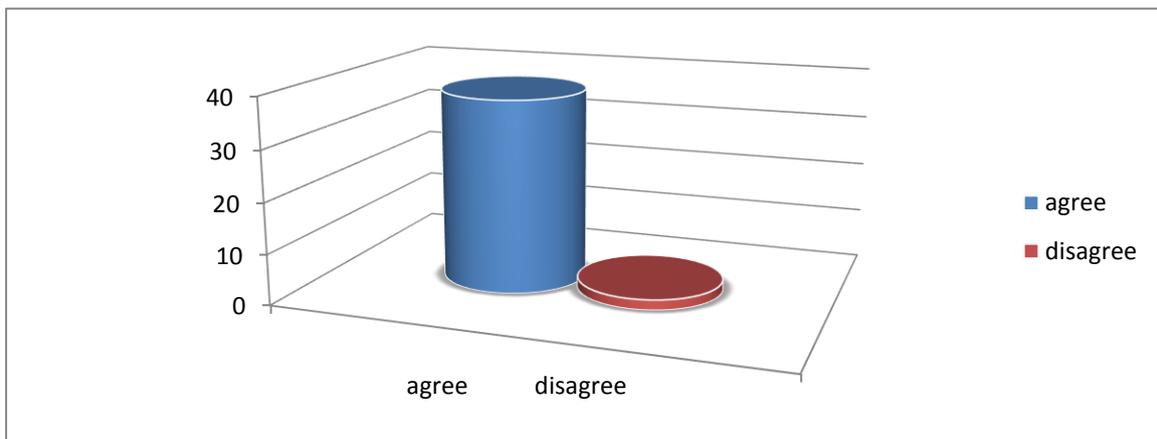


Figure2.1.44 the Use of Coloring in Revising Exams

Our reading of the table and the graph shows that most pupils agree that their use of bright colors and the various drawings that they like during their review of the lessons contribute to the activation of their memory while passing the exam and thus the correct answer to the questions. While the minority 5% (2) pupils is oppose it.

The analysis and interpretations of the questionnaires show that the vocabulary has an essential role in teaching and learning English at Rouina Mohamed Ghantar Middle School. Initially, concerning the teachers' questionnaire the results obtained demonstrate the importance that teachers give to vocabulary teaching, and their use of various practices for successful teaching. Moreover, results assert that teachers do not just explicate new vocabulary, but also they check whether their pupils completely retained vocabulary or not. The major functional technique teachers rely on when teaching new words is introducing them in a context. After that, the application of working memory tasks comes at the immediate place. The third section "the working memory-based exercises" reveals that teachers carry about the adoption of teaching methods with its different types, especially image. They consider them as entertaining practice that creates a positive environment. Regarding pupils' questionnaire, it can be deduced that the majority of pupils considered working memory task as interesting and a beneficial practice to work with. Also, the majority of the learners are being fulfilled with the ways in which courses are presented with the use of colors, repetition, and movements, because teachers explain the new words fluently and the pupils interact and follow. The results show that the pupils like to imitate their teachers' gesture and way of pronouncing.

Conclusion

In this part, both the questionnaires have been to a great extent informative in that they reported the attitudes, assessment, perceptions, and values that teachers of English language harbor in relation to their pupils, their subject, and their environment. Despite the nature of the teaching approaches, memory-based exercises are not much seriously taken into consideration which may in the long run compromise the effectiveness of learning English at middle school level. We have noted that teachers are meaningfully engaged in the teaching/learning process in spite of challenges.

Part Two: Qualitative Data Analysis of the Classroom Observation and Stimulated Recall

Interview

The present study aims to investigate the perception of the English language teacher toward the used of teaching vocabulary strategies to improve EFL learner retention. As result, this part implies qualitative interpretations of classroom observations and stimulated recall interviews' data. The objective of qualitative research is to attempt to provide deep insights about social phenomena. Hancock et al. (2007, p.1) point out that “Qualitative research attempts to broaden and/or deepen our understanding of how things came to be the way they are in our social world”.

2.2.1 Classroom Observation

In addition to questionnaire, classroom observation was also a tool of collecting data. The rationales and the purposes behind the selection of classroom observation as a key gathering data instrument of this research are: to give clear insights about what is happening in classroom, it is a functional tool that permits observing different behaviors, to note and describe the inside representation of teaching and learning within the process approach. O'Leary (2014) mentioned, “... classroom observation is used as an instrument for observing and assessing classroom teaching and learning” (p.49).

2.2.1.1 The Aims of Classroom Observation

The purpose of this study is to investigate how the use of working memory-based exercises while teaching and learning vocabulary is beneficial to pupils in terms of enhancing their retention of words and giving them more positive perception towards different teaching vocabulary practices. Wilkinson and Birmingham (2003) believe that

Classroom observation can allow researchers to understand much more about what goes on in complex real-world situations than they can ever discover simply by asking questions of those who experience them (no matter how probing the questions may be), and by looking only at what is said about them in questionnaires and interviews.(
p. 117)

Consequently, classroom observation is the most proper implement that enables the observer to have a close look at pupil's reaction towards the activities assigned by the teacher. In current study, it is also intended to determine the extent to which FL teachers are using TPR method, repetition ,and the use of colors and the extent to which their pupils have the ability to follow its steps, as well as, to have a look for complexities and challenges come across by pupils.

2.2.1.2 Description of the Classroom Observation

Our class observation was held in March 2017 with four first year classes in Rouina Mohamed Ghantar Middle school. Since we have been limited by the time (because there were some pedagogical issues) , we have only participated four (4) sessions each session took about 1 H and all sessions were conducted by the same teacher. The class contained an ideal number of pupils (35) with a balanced number of girls and boys.

In addition, the classroom observation that we have took the form of semi-structured observation because we have prepared a list of basic elements in advance that we were interested in noticing and observing it. Also, during each one hour, we sat on one side of the classroom where can observe, without interfering the teaching and the learning activities and we have not used any recording or filming devices.

Observing checklist was grouped into main categories (see appendices 03): Class structure method /teacher-pupil interaction /the use of TPR/ the use of repetition technique/ employing the colors. It contains a rating scale of three points were ranged as follows: observed, not clear, and not observed. This list has given us the right direction and guidance for our results on how the teachers use such method to carry out their pupils' retention of vocabulary. In short, our observation was full of fun and got valuable data that the teacher provides us. Also, teacher was very kind and helpful to us, which made us feel comfortable and also involved in the courses.

2.2.1.3 The Classroom Observation Findings

As mentioned previously, the main objective behind choosing the classroom observation as a data gathered tool is to detect most of methods that teachers follow. Also, it is used to examine the pupils' interaction, comprehension, and level of retaining the content. We have observed the fact that teaching vocabulary is not established by its own. There is no session called "vocabulary knowledge". Vocabulary is taught within other language aspects such as reading or grammar. The teacher affirms that she approximately present new vocabulary implicitly / explicitly.

2.2.1.3.1 Appropriate and Inappropriate strategies

2.2.1.3.1.1 Writing on the Board

Concerning the lessons arrangement, we have observed that the teacher make use of the blackboard to introduce the lecture. She focuses on the main concepts to be effected in the session, as she utilizes it to demonstrate and explain some ambiguous ideas by drawings, and to spell out some unfamiliar words. Besides, we have observed that some pupils were interested in the course, interact with their teacher and asking questions each time they face complexities. Some other pupils have exposed no awareness and keeping quiet during the whole session. They use dictionaries looking for help so that they can participate. We may say that those pupils are active participants.

During the session one which is about "time", the teacher divides the board into two parts. In the right part she draws a big watch and then asks pupils "what is this?". The pupils are responded differently e.g. some of them say it is « ساعة » the others say it is "time". As well as, the occurrence of the mother tongue in classroom is such unacceptable concept from the teacher's side, since she considers that they are learning a foreign language. However, when a pupil says a word in Arabic, the teacher does not refuse and provides its English equivalent meaning.

The use of the board is clearly observed in this session compared to other session that we attended. In addition, the teacher encourages her pupils to participate and interact by asking some of them to go to the board and draw his own watch. This kind of practice has important effect especially on the shy persons.

2.2.1.3.1.2 Using Pictures

Noticeably, pupils support the implementation of colored images in classroom (pictures, photographs, object). They look enjoyed and interested because of the application of these materials. Sometimes, they have asked the teacher by themselves to bring them the useful pictures to classroom. In the presented lesson of “time and daily activities”, the teacher select amount of pictures (6 pictures) which present the daily routine including “waking up, pray, eating the breakfast, and going to school”. Those images were paste disorderly on the middle of the board. The teacher asked her pupils to reorder them in appropriated terminology.

It is obvious that the teacher encourages the pupils to participate; she inquires them to go to the board, take the picture, and then paste it in its suitable place. Furthermore, In “The nationality” lesson pupils were so active because they have seen the name of countries also they studies about flags. The teacher sticks pictures about “boys and girls” from different countries (Jim/Jack/Suzie/Ahmed.). Teacher asks her pupils about the member of family, and then they answer collectively: father, mother, uncle ect. Teacher invites one pupil about his father job (in Arabic) e.g. Teacher asks:” Osama, what is your father job? “. Osama replies: “the job is “فلاح”.” Then the teacher corrected it and say: “great dear, you have to say “My father is "فلاح", and we call it a “Farmer” “. She typically rewards them through saying type words such as: “you are right”, “you are very clever”, “very good answer” or sometimes she asks to clap hands as a way to admire the pupil with right answer. Sometimes, the teacher gives candies to learners who performed well. Concerning the punishment, the teacher rarely punishes her pupils because they have not done well in assessments but she punishes them just if they mis-behave in the classroom. Also, to attract the pupils’ attention the teacher shows pictures of jobs, pupils answer differently.

2.2.1.3.1.3 Repetition and pupils' retention of words

Usually, the teacher starts by asking one pupil to write down the date on the board. Next, she creates an appropriate context in relation to the topic to be taught. Knowing a new word does not denote just knowing its meaning, form, and use, other than knowing its pronunciation. Therefore, pupils need to listen to native speech to get right pronunciation; however, most teachers do not offer their attention to this substance. Or other causes may be interrelated to accessibility features because some auditory materials are less accessible. In some lesson, teacher does not involve pupils in recurrent repetitions. New items can be repeated incidentally but not deliberately.

Pupils were so active and gave other examples in English and Arabic and then pupils repeated them with correct spelling and pronunciation.

2.2.1.3.1.4 Using Movements

Frequently in the same session, the teacher exposes her pupils to practice and use vocabulary. She asks them to gather in groups and notifies them that they have from ten to fifteen minutes to terminate the task. The pupils are so satisfied and active to work together. The use of gestures and movements is clearly observed while presenting new items; she always set them in suitable context in where pupils are able to determine their different applies. Additionally, she uses gestures and mimes to lead pupils obtain the word's meaning effortlessly. The following example demonstrates this point:

- Teacher: what is the meaning of the action “getting up”?
- Pupils: (keep quiet)
- Teacher: After we slept we ?(Using miming and gestures).
- Pupils: (say it in Arabic) “نستيقظ”.
- Teacher: yes my dear pupils, the verb is “to wake” or “ getting up”.

The teacher notices that the application of such movements is workable with pupils' vocabulary learning because the assessments' results show their achievement and requisition

development. The total physical response is clearly used on most of the sessions. Therefore, it is remarkable that using mimes and gestures is widely applied if compared to further forms of teaching methods. With first year classes, the teacher often presents new words in every lesson, even though the lesson is not related only to teaching vocabulary.

After every attended class, I meet the teacher and ask her some questions about whether she is contented or not, whether she will rely on same teaching method and techniques other classes, and whether she satisfied her aims.

2.2.2 Stimulated Recall Interview

Stimulated Recall Interview is a qualitative research tool in which the participants view a set of pictures or deals with direct questions about the previous lesson. It gives valuable information about pupils' thinking and argumentation. Bloom (1953, p. 161) defines it as follows: "The basic idea underlying the method of stimulated recall is that the subject may be enable to relive an original situation with vividness and accuracy if he is presented with a large number of the cues or stimuli which occurred during the original situation".

Also, it is designed to emphasis the learners' production after the session. The aim behind opting for such type of interviews is that it allows the researcher to examine the participants' points of view different issues. In addition, it seeks to highlight the results of both teachers and learners' questionnaire. We select randomly 12 pupils and prepare four questions about the previous lecture to examine their comprehension and retaining of words. The interview is taking place on March 13rd. 2017 it is directly after "time and daily activity" lesson. The interview was in Arabic, considering they were still very beginner.

2.2.2.1 Analyses of Stimulated Recall Interview findings

The current part deals with the analysis and interpretation of the stimulated recall interview, hereafter (SRI) with twelve pupils. The SRI includes 4 questions (See appendix4) dealing with:

a. Pupils' understanding of the previous lesson.

- b. The difficulties that face pupils' comprehension.
- c. The pupils' level of retention the lesson.
- d. Small tests' task and instructions by using the colors and the pictures.
- e. Pupils attitude toward using TPR and repetition method (shaping a watch practice).

2.2.2.1.1 Difficulty to Understand

The interviewees were asked about their comprehension of the "time and daily activities" lecture. The objective of this question is to obtain firstly their understanding of the whole lesson. As Asher declares that the comprehension comes first. It is difficult for pupils to maintain and retain something that unfamiliar for them. Referring to the pupils' responses about this question, the majority of them answers this question with "no" and declares that it is new for them. Also, some of pupils state that the lesson was easy to understand. However, it was too long and fully of aspects that they unable to cover it. Pupils who struggle to understand the lesson claim that it refers to the teacher's speech. They do not have enough background about the presented lecture. Some pupils said that they have difficulty understanding words in English in general. They do not understand what the teacher says until after the words are translated into Arabic. Some of them said that the previous lessons were easy compared to this lesson. The pupils have difficulty in expressing time. While the time has exceeded with minutes need to be mentioned as 9:15, for example, they find difficult to express.

Talking about understanding in this case leads us to look for further explanation according to scholars views. There is important relationship between the problems faced by the pupils in pronunciation, learning grammar, knowledge of sentence pattern, custom of hearing news, rectification of homework, memorization lacking understanding, and different variables concerning sex, locality and type of management (Singaravelu, 2001). This idea emphasizes that comprehension influences the continuous of any teaching and learning progress.

2.2.2.1.2 Difficulty to Memorize New Words

This section aims to indicate the level of pupils' capacity of memory. The participants were asked about the lesson content and the vocabularies that they have still remember. The pupils responded to this question by remembering that the watch is called "الساعة" as they use the translation. Some said it was "o'clock". While they state that they find it easier to know the time of the digital clock.

For everyday activities, they mostly remember "getting up, eat the lunch, go to school ..." and show a good response when they remembered the words through the teacher's gestures during the lesson. The obtained results can devote into two major concepts, firstly the pupils with poor capacity of remember words may be they are not interested in learning the language and just think about passing the lessons. According to Verghese (2009), there are so many factors affect the procedure of learning a second language, including attitude, classroom conditions, motivation, duration of exposure to the language, self-confidence, environment, family background, and availability of experienced teachers . Secondly, pupils whom could remember easily the main principles of the lesson are more motivated end interested

2.2.2.1.3 Need for Colors to Remember

The purpose of this part is to test the extent to which pupils can remember to associate activity with the right time using images and colors. We select a set of flashcards comprise disordered pictures and times (see appendix 05). The results of this question showed good response and interaction from the respondents. All the questions were answered correctly.

The findings highlight the effectiveness of the use pictures and colors to facilitate the retention of vocabulary. Also, Sprenger (1999) focuses on the importance of the emotional factor while teaching L2 vocabulary by diversifying the implemented educational and assessment tools. She argues that if pupils are engaged emotionally in learning vocabulary, they remember more effectively because the recently learnt lexical items will be stored in the emotional lane

2.2.2.1.4 Call for Movements in the Classroom

To move on something more practical and to find out the effectiveness of TPR in such a type of lessons, we ask the pupils to organize in a circle. I stand at the center of the circle to play the role of clock hands, and then I ask each pupil to represent a number assigned in order from 01 to 12. For example, the pupil "Salah" says "I m one", followed by the pupil "Zubair" says "I m two" go behind by pupil "Rayan" says" I m three" and so on . That previous task is selected to remind them in numbers by using repetition. After that, I take different positions and ask the two pupils whom I indicated by my hand to read the hour.

The results which we notice show a good and positive interaction from the pupils with this simple application and everyone was satisfied with his performance. The TPR method also highlights two central elements: the use of movement as a memory developer and essential as the only method of instruction the teacher employs commands to direct the pupils.

Recommendations

We believe that strong vocabulary gives the pupils the right words to retain and use at the accurate time .In the light of our findings; we recommend the following suggestions for the main doers in educational domain:

2.1 Ministry of Education of Algeria

The lack of access for most schools clearly affects the proper functioning of the education process .the Ministry will have to provide schools with modern and technological supplies such as digital projectors, photos and drawings parallel to the educational curriculum. In addition, it should reconsider the size of the sessions for first-year pupils, considering that English is a new language for them to focus more on vocabulary acquisition. Furthermore, the Ministry of Education has to make the English language classes in the cohort system. Because we have noticed that the large number of pupils in the section has a negative impact on the concentration of pupils and then their memory capacity.

2.2 The Course Designers

Curriculum designers of English language should be aware of including interactive and exaggerated images in the English language textbook of middle level. Since the pupils are beginners, the textbooks should comprise tasks about using movements and role plays because at this stage they like to imitate. The course designers have to focus on pupils' needs and pay more attention to intentional vocabulary training, such as total physical response method.

2.3 The Teachers

Referring to the findings from the classroom observation, teachers should work in cooperation with pupils to guide them towards determining and developing their own personal set of vocabulary integration techniques. Teachers must spotlight on pupils' interests and preferences by allocating approximately 10 minutes before the end of the lesson to recall the most important words. Moreover, it is preferable to perform a test of working memory capacity at the commencement of

the academic year in order to identify the pupils' level of remembrance and consequently spotting the proper teaching methods.

2.4 The Pupils

The lack of recalling words is an impediment to some pupils that prevents them from participating in activities in front of their colleagues in the classroom. The pupils should be aware that using such kind of role plays is an opportunity for those pupils to provide them with a safe atmosphere that enables them to participate, practice language and take the risk of expressing themselves in front of their colleagues. To make the process of remembering vocabulary more effective, we suggest that pupils dedicate colorful papers that they always carry with them and write on them every new word they acquire.

GENERAL CONCLUSION

Achieving communicative competence in foreign language can be improved by developing vocabulary learning and teaching. In detail, learning and retaining vocabulary items involves a set of strategies and techniques. This study is conducted to evaluate the use of working memory-based techniques in the teaching and learning of English language in classrooms, and to examine its motivational impact on teaching pupils. The investigation is carried out at Rouina Mohamed Ghantar middle school Ouled Djellal-Biskra for the academic year 2016/2017. It aims at whether confirming or rejecting the hypothesis that when the teachers utilize working memory-based practices, namely as Total Physical Response (TPR), colored paper, and repeat after me protocol, then their learners' would be able to retain vocabulary.

We have discussed two central extents in the theoretical part which are working memory role in enhancing the maintenance and vocabulary teaching strategies used by EFL teachers from presenting different concepts related to retention vocabulary. The chapter one which presents the literature side of our work comprises two parts. Firstly, we have introduced our study by presenting all the research's main questions, hypotheses and objectives. It summarizes all what converse in details in the other chapters. Secondly, the part one covers related issues on working memory. In this part, we define working memory, we present its traits, and the major focus is on its relation with language learning especially with vocabulary. The next part deals with the definition of vocabulary, importance and techniques to be followed for effective recalling of the words. Finally, to investigate the research hypothesis we have to move to something more practical. The second chapter consists of the data collection and summary of their findings. Throughout this chapter, we try to prove the effectiveness of teaching assists in instructing and retention vocabulary at first year middle school level. We conclude the chapter with general recommendations about the usefulness of working memory-based techniques in teaching vocabulary.

The results of the teachers' and pupils' questionnaires have provided precise data on vocabularies are presented and used, and what procedures are employed. The collected data revealed that teachers consider the valuable role of words in communicating a foreign language. As well, teachers show that they adapt any procedure in order to minor the affective variables in the classroom and try to create a favorable classroom atmosphere. For one rationale or another, each teacher applies a certain technique to teach vocabulary, but they all agree that teaching new words within context comes at first. On other side, working memory practices supply the vocabulary teaching/learning aims too. However, teachers state that they face confronts when implementing pedagogical aids. This directs them to utilize simply serves which may not provide apparently explanations of words.

Through the findings adopted from the classroom observation, vocabulary items were strongly observed in most of the lesson. The collected data from the classroom observation costume both teachers' and pupils' responses in the questionnaires. It obvious that colors is a good way to memorize items because it simplify the task for both teacher and pupils and reduce the distance between them, and this influence learning and teaching process. It is also noticed that pupils' level increase while using repetition and such physical practices, pupils are able to answer and memorize words easily .Besides, During the stimulated recall interview, the participants are motivated about the use of total physical response because it is new thing for them used in the class, this obviously will guide to good sympathetic and as a result to superior learning.

Generally speaking, the field work has confirmed the essential role of practices that related to the working memory capacity to teach vocabulary. Also, they involve pupils in the learning task by producing a positive classroom circumstances. Thus, the use of this kind of substances in foreign language teaching and learning is a superior ways, not just to develop retention of English vocabulary, but pupils also will be able to develop their communicative skills.

Bibliography

- Alloway, T. P. (2006). *How Does Working Memory Works in Classroom*. New York: University of Durham, Susan E, Gathercole University of York. Educational Research and Reviews.
- Alloway, T. P., Gathercole, S. E., & Pickering, S. J. (2006). Verbal and visuo-spatial short-term and working memory in children: Are they separable? *Child Development*, 77, 1698–1716.
- Alloway, T.P. (2011). A comparison of working memory profiles in children with ADHD and DCD. *Child Neuropsychology*, 21, 1-12.
- Anuthama, B. (2010). *Strategies for Teaching Vocabulary*. Journal of NELTA, 15 (1-2), 10-15.
- Baddeley AD, Hitch G. (1974). *Working Memory: The psychology of learning and motivation*. Vol. 8. New York: Academic Press. pp. 47–89.
- Baddeley AD. (1986). *Oxford Psychology Series No. 11*. Oxford: Clarendon Press; Working Memory.
- Baddeley, AD. (2006). *The Multi-Component Model of Working Memory: Explorations in experimental cognitive psychology*. *Neuroscience, Volume 139, Issue 1, pp 5-21*
- Beer, J., Pisoni, D.B., Kronenberger, W.G., & Geers, A.E. (2010). New research findings: executive.
- Ben Sola, A. (2012) .The influence of using audiovisuals aids in teaching English vocabulary. A Dissertation Submitted to Mohamed Kheider University of Biskra in Partial Fulfillment of the Requirements for the Degree of Master in Sciences of Languages. Biskra University
- Bloom, B.S. (1953). *Thought-processes in lectures and discussions*. *Journal of General Education*, 7, 160-169.
- Bogaards, P., & Laufer, B. (2004). *Vocabulary in a second language*. Amsterdam: John Benjamins publishing company.
- Canlearn-Center.(2017) .Working Memory. Retrieved from https://canlearnsociety.ca/wp-content/uploads/2013/03/LC_Working-Memory_N2.pdf

- Coady, J. and Huckin, T. (1997). *Second Language Vocabulary Acquisition*. Cambridge: Cambridge UP.
- Collet, I. (2012, 01 26). *Why we forget*. Retrieved 26 03, 2017, from Brainscape: <http://blog.brainscape.com/2012/01/why-we-forget/>
- Cowan N. (1999). *An embedded-processes model of working memory*. *Models of Working Memory: Mechanisms of Active Maintenance and Executive Control*. Cambridge, UK: Cambridge University Press, 62–101.
- Cowan N. (2001) *The Magical Number 4 in Short-term Memory: A reconsideration of mental storage capacity*. *Behav. Brain Sci.* 87–185.
- Cowan N. (2016). *Working Memory Capacity: Classic edition*. New York: Routledge.
- Cowan, N. (2001). *Metatheory of storage capacity limits: Behavioral and brain sciences*, 24(01), 154-176. 2017.
- Dörnyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford: Oxford University Press.
- Engle, R. W. (2002). *Working memory capacity as executive attention: Current directions in psychological Science*, 11, 19–23.
- Folse, K. S. (2008). *Six Vocabulary Activities for the English Language Classroom: English Teaching Forum*, Vol.46, No.3, p. 12.
- Gairns, R., & Redman, S. (1986). *Working with Words: a Guide to Teaching and Learning Vocabulary*. Cambridge: Cambridge University Press.
- Gathercole, S.E, Alloway, T.P., Kirkwood, H.J., & Elliott, J.E. (2008). Attentional and executive function behaviors in children with poor working memory. *Learning and Individual Differences*, 18, 214-223.
- Gnoinska, A. (1998). “*Teaching vocabulary in colour.*” *English Teaching Forum*, 36(3), 12-15.
- Goodridge, V. (2010). *Memory: Mnemonics and the lexicon. IH Barcelona annual conference*, (p. 01). Barcelona.
- Griffiee, Dale T. (1992). *Songs in action*. Trowbridge: Prentice Hall International.

- Harmer, J. (2001). *The practice of English Language Teaching*. 3rd ed. London: Longman.
- Hill, D. (1990). *Visual Impact: creative language learning through pictures*. Longman: Group UK Limited.
- Laufer, B. (1989). *A Factor of Difficulty in Vocabulary Learning: Deceptive transparency*. *AILA Review* 6, 10-20.
- Lightbown, P. & Spada, N. (1999) *How Languages are Learned*. New York: Oxford University Press. Second Edition.
- McKay, S.L. (2006). *Researching second language classrooms*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- McLeod, S. (2008). *Forgetting*. Retrieved 03 12, 2017, from simply psychology: <https://www.simplypsychology.org/forgetting.html>
- Merriam-Webster Online Dictionary. (2017). *Vocabulary*. Retrieved on March 9, Available at: <https://www.merriam-webster.com/dictionary/vocabulary>.
- Miller GA. (1956). *The Magical Number Seven, Plus or Minus Two: some limits on our capacity for processing information*. *Psychol. Rev.* 63:81–97
- Mohammed, E. F. (2009). *The Effectiveness of TPRS in Vocabulary Acquisition and Retention of EFL Prep. Stage Students and their Attitude towards English Language*. Unpublished MA Thesis, Mansoura University, Egypt.
- Moller AP, Flensted-Jensen E, Mardal W. (2009). Adjustment of the annual cycle to climatic change in a long-lived migratory bird species. *Curr Zool* 55:92–101
- Morrow, K. (1983). Principles of Communication Methodology. In Johnson, K. and Morrow, K. *Communication in the Classroom: Application and Methods for A Communicative Approach*. Longman House Burnt Mill, Harlow, Essex CM20 2JE, England: Longman Group Limited.
- Morrow, K. 1983. "Principles of Communication Methodology". In Johnson, K. And Morrow, K. *Communication in the Classroom: Application and Methods for A Communicative*

Approach. Longman House, Burnt Mill, Harlow, Essex CM20 2JE, England: Longman Group Limited.

Mukoroli J. (2011). *Effective Vocabulary Teaching Strategies for the English for Academic Purposes ESL Classroom*. SIT Graduate Institute, Brattleboro, Vermont.

Nation, I.S.P. (2001). *Learning Vocabulary in Another Language*. Cambridge: Cambridge University Press.

Nation, P. (1990). *Teaching and learning vocabulary*. Boston: Heinle & Heinle.

Nation, P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.

Nunan, D. (1991). *Language Teaching Methodology*: Prentice Hall International Ltd, 188-244.

O'Malley, J. M; Chamot, A., U. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.

Oxford Dictionaries. (2017). Retrieved on March 10, 2017. Available at

<http://oxforddictionaries.com/definition/english/vocabulary>.

Pinter, A. (2006). *Teaching young language learners*. Oxford: Oxford University Press.

Richards, J. (1985). *The context of language teaching*. Cambridge: Cambridge University.

Richards, J. C. & Rodgers, T. S. (2001). *Approaches and methods in language teaching* (2nd ed.). Cambridge, UK: Cambridge University Press.

Saputra, G.D. (2007). *The Influence of Contextual Teaching Learning to the Students Vocabulary Achievement*. Unpublished MA Thesis, University of As-Syafi'iyah. East Jakarta.

Schmitt, N. & Schmitt, D. (1995) Vocabulary notebooks: Theoretical underpinnings and practical suggestions. *English Language Teaching Journal* 49 (2), 133-143.

Schmitt, N. (2000). *Vocabulary in Language Teaching*. Cambridge. United Kingdom: Cambridge Language Education.

Schmitt, N. (2002). *Vocabulary in language teaching*. New York: Cambridge university press.

Scott, A. and Ytreberg, H. (1993). *Teaching English to Children*. Longman.

- Singaravelu G. (2001). "A Study of the problems of students of higher secondary classes in learning English as a second language in Thiruvarur District". Indian Educational Abstracts, 6(2), 22.
- Souleyman, H. M. (2009). *Implicit and Explicit Vocabulary Acquisition with a Computer-Assisted Hypertext Reading Task: Comprehension and Retention*. Unpublished Ph.D. Thesis, University of Arizona, USA.
- Takač, V. P., & Singleton, D. (Eds.). (2008). *Vocabulary learning strategies and foreign language acquisition*. Canada: Multilingual Matters Ltd.
- Thornbury, S. (2002). *How to Teach Vocabulary*. England: Pearson Educational Limited.
- Torres, A. C. G. (2003). Working Memory Capacity and reader's performance on main idea construction in L1 and L2. Unpublished doctoral dissertation. Florianópolis: Universidade Federal de Santa Catarina.
- Van Gog, T. (2005). *Instructional Design for Advanced Learners*. *ETR&D*, Vol. 53, No. 3, pp. 73–81.
- Verghese, Paul C. (2009). *Teaching English as a second language* (9th, ed.). New Delhi Sterling Publishers.
- Wilkins, D. (1972). *Linguistics in language teaching*. Cambridge: CPU.
- Wilkinson, D. and Birmingham, P. (2003). *Using Research Instruments: A Guide for Researchers*. London: Routledge Falmer.

Appendix 01

Questionnaire for Teachers

Vocabulary teaching Strategies used by EFL Teachers

Dear teachers,

You are kindly invited to fill the following questionnaire that figure out how middle school teachers of English working at Rouina Mohamed Ghantar teach vocabulary to first year pupils. We would be very grateful if you could answer the questions below. In addition, your answers will be kept confidential.

Thank you in advance

Mezghiche Sara

Master Two English Language Student/ Department of English

Mohammed Khieder University of Biskra

Section One Background Information

1. How long have you been teaching English? Years
2. Do you have any training in ENGLISH before? Yes No

Section two Teaching Vocabulary to middle school pupils

- Please put a cross (×) on the option that best suits your opinion

3. Do you like teaching vocabulary? Yes No

Explain

.....
.....

4. How do you teach vocabulary?

.....
.....

5. Does this technique help pupils to understand the meaning of the words?

Yes No

Please explain

.....
.....
.....

6. Does this technique help pupils to remember the word and its meaning correctly during the session?

Yes No

Please explain

.....
.....
.....

7. Do these techniques help pupils to remember the word and its meaning correctly during the examination?

Yes No

Please Explain

.....
.....
.....

Section Three. Working Memory-Based Exercises

a. Total Physical Response Approach and Vocabulary Teaching

8. What is your definition of Total Physical Response approach?

.....
.....
.....

Read each statement and cross the option that best suits your opinion, according to the following scale:

1.....strongly agree

3..... disagree

2.....agree

4..... strongly disagree

9. The teacher must select a certain amount of words to make a list so that learners can memorize them.

1

2

3

4

10. A second language can be learned in the same way as the first – through the same natural processes.

1

2

3

4

11. Requiring pupils to respond to commands, which in turn require physical movements, is effective technique to retain words.

1

2

3

4

12. The pupils' comprehension may be enhanced through the use of mime role plays.

1

2

3

4

13. It can be a successful and fun way of changing the dynamics of a lesson used in conjunction with other methods and techniques.

1

2

3

4

b. Repeat after me protocol and Vocabulary Teaching

14. What is your definition of repetition in relation to vocabulary teaching?

.....

.....

.....

Read each statement and cross the option that best suits your opinion, according to the following scale:

1.....strongly agree

3..... disagree

2.....agree

4..... strongly disagree

15. Repeating words as much as possible helps clarify pronunciation and provides opportunities to transfer words from working memory to long-term memory.

1

2

3

4

16. Repetition will help embed the words into the pupils' memory.

1

2

3

4

17. Learning a big amount of vocabulary can only be obtained by repeating individual words.

1

2

3

4

18. Repetition can be a valuable tool in the EFL classroom as many of pupils are busy with their daily lives and may have limited exposure to English when not in class.

1

2

3

4

C. Colored papers and Vocabulary Teaching

19. What do you know about the use of colored papers in teaching?

.....
.....
.....

Read each statement and cross the option that best suits your opinion, according to the following scale:

1.....strongly agree

3..... disagree

2.....agree

4..... strongly disagree

20. Color is useful in learning and revising, as well as making students and teachers aware of the way they approach certain tasks.

1 2 3 4

21. Coloring words helps to concentrate on the task and extends the time and attention students give to each word to be learnt.

1 2 3 4

22. Do you think that making colored drawings or symbols for words or grammatical categories to be used in the classroom is wasting of the time?

1 2 3 4

23. Developing new ideas, drawing pictures, and playing with words make studying a pleasure rather than as a duty.

1 2 3 4

- Anything you would like to add?

.....
.....
.....

Thank you for your corporation

Appendix 2

استبيان إلى التلاميذ Questionnaire for Pupils

عزيزي التلميذ(ة)،

نحن بصدد إجراء دراسة حول تأثير استعمال التطبيقات المتعلقة بالذاكرة العاملة لتحسين تذكر المفردات. هذه الدراسة تخص التلاميذ تحديدا . من أجل تحقيق فاعلية هذه التطبيقات ومعرفة ما إذا كانت تستخدم في الوسط التربوي، نحن بحاجة إلى مساعدتكم في ملء هذا الاستبيان.

الأسئلة

Section one: Background Information

1- السن: Age

2- الجنس: ذكر Boy أنثى girl

Section Two: Vocabulary Learning

Item 03: Do you like learning vocabulary?

3. هل تحب تعلم المفردات ؟

Yes نعم no لا

Item 04: Do you understand the meaning of vocabulary?

4. هل تفهم معنى المفردات؟

Yes نعم no لا

Item05: Are you able to retain the word correctly during an activity or exam?

5. هل بإمكانك تذكر الكلمات جيدا أثناء حل التمارين أو في الامتحان ؟

Yes نعم no لا

Why ؟ لماذا

.....
.....

Item 06: how do you want your teacher to teach you vocabulary?

6. كيف تريد من معلمك أن يدرسك المفردات ؟

.....
.....
Section Three: Working Memory-Based Exercises

a. Total Physical Response Approach and Vocabulary learning

Item 07: Which strategy helps you retain the vocabulary?

- 7 - ما هي الطريقة التي تساعدك في تذكر المفردات أكثر؟
- | | | |
|-------------------------------|--------------------------|---------------------------|
| Using songs | <input type="checkbox"/> | - استعمال الأغاني |
| Repetition | <input type="checkbox"/> | - الإعادة المستمرة |
| Using the pictures and colors | <input type="checkbox"/> | - استعمال الصور و الألوان |
| Using it in conversation | <input type="checkbox"/> | - توظيفها في الحوار |
| Educational games | <input type="checkbox"/> | - الألعاب التربوية |

Item 08: Does the teacher make some movements and gestures to facilitate understanding?

- 8- هل يقوم الأستاذ بتمثيل الحركات و الإيماءات ليسهل عليك الفهم أكثر؟
- لا يستعمل Used يستعمل

Item 09. Does the teacher encourage you to participate in dialogues using new vocabulary learned in the lesson?

- 9- هل يشجعك الأستاذ على المشاركة في الحوارات باستعمال المفردات الجديدة المكتسبة في الدرس؟
- لا يستعمل Used يستعمل

b. Repeat after me protocol and Vocabulary learning

Item 10. Does the teacher repeat the important words more than once in the lesson?

10. هل يكرر الأستاذ الكلمات المهمة أكثر من مرة في الدرس؟
- لا يستعمل use يستعمل

Item 11. You can decode words better when it would return more than once with your teacher?

11. يمكنك حفظ الكلمات أفضل عندما تعيدها أكثر من مرة مع أستاذك
- موافق disagree غير موافق

Item 12. Rewrite the words acquired more than once help you instilled in your mind and easily written back.

12. إعادة كتابة الكلمات المكتسبة أكثر من مرة يساعدك على ترسيخها في ذهنك و سهولة كتابتها مرة أخرى

موافق agree disagree غير موافق

Item13: Does the collective repetition of vocabulary help you to pronounce properly?

13. هل التكرار الجماعي للمعلومة يساعدك على نطقها بشكل سليم؟

موافق agree disagree غير موافق

c. Colored papers and Vocabulary learning

Item14: Does your teacher use pictures and colors in his explanation?

14. هل يستعمل الأستاذ الألوان و الصور في الشرح

لا يستعمل not use يستعمل used

Item15: Does the teacher color or underline important words?

15. هل يقوم الأستاذ بتلوين أو تسطير الكلمات المهمة؟

لا يستعمل not use يستعمل used

Item16: Does the teacher ask you to draw and use colors in your copybook to facilitate your reviewing?

16. هل يطلب منكم الأستاذ الرسم و استعمال الألوان على دفاتركم ليسهل عليكم المراجعة؟

لا يستعمل not use يستعمل used

Item17: Does scripting language rules in colorful flashcards help you easily remember?

17. هل كتابة قواعد اللغة في قصاصات ملونة يساعدك على سهولة تذكرها؟

موافق agree disagree غير موافق

Item18: Does the use of colors help you in writing the word correctly?

18. هل استعمال الألوان يساعدك في تخزين الكلمة ومن ثم كتابتها بشكل صحيح؟

موافق agree disagree غير موافق

Item19: Do pictures and colors assist you in retention of words?

19. هل تساعدك الصور و الألوان في تذكر الكلمات؟

disagree غير موافق

agree موافق

Item20: do drawing and coloring while you review facilitate the remembrance of information in the exam?

20. استعمال الرسم و الألوان أثناء مراجعتك يسهل عليك تذكر المعلومة في الامتحان.

disagree غير موافق

agree موافق

- Anything you would like to add?

-أي شيء تريد أن تضيفه؟

.....
.....



Thank you

شكرا لك



Appendix 03

Classroom observation checklist (semi-structured)

Teacher:

Course:

Class:

Objective:

Place:

Date:

Time:

Number of Students:

Observation items		observed	Need to emphasis	Not observed
Class structure	Reviews previous day's course content			
	Summarizes course content covered			
	Directs students preparation for next class			
	Gives overview of day's course content			
Methods	Provides well-designed materials			
	Delivers well-planned lecture			
	Uses of translation			
Teacher-Students interaction	Teacher fosters students to speak			
	Pupils motivated in class			
	Reinforce and advise students to believe in their abilities.			
	Uses repetition and more explain			
	Asks for collective repetition			
	Asks for individual repetition			

The use of total physical response	Uses gestures			
	Employs group/individuel work			
	Pupils' imitation of teacher' miming actions for comprehension			
The use of colors and pictures	Uses colors			
	Employs suitable pictures			
	Asks for drawing and underline			

Appendix 04

Stimulated Recall Interview Questions

1. Did you understand the 'time and daily activities' lesson?

1. هل فهمتم درس "الساعة والنشاطات اليومية"؟

.....
.....
.....
.....

- Is this difficulty with all the lessons or only with this lesson?

- هل هذه الصعوبة مع كل الدروس أم مع هذا الدرس فقط؟

.....
.....
.....
.....

2. What do you remember from the lesson?

2. ماذا تتذكر من الدرس؟

.....
.....
.....
.....

3. What do you think about working with pictures and clips of time for test their ability to retain ?

3. ما رأيكم في اختباركم بتقديم صور وقصاصات عن الوقت لمعرفة ما إذا تستطيعون تذكرها بشكل صحيح؟

.....
.....
.....
.....

4. What do you think about more active test by shaping a clock shaped circle to show the effectiveness of 'TPR' and repetition method?

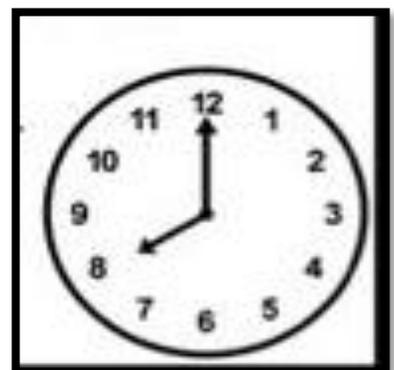
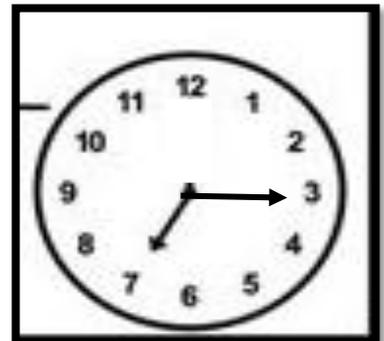
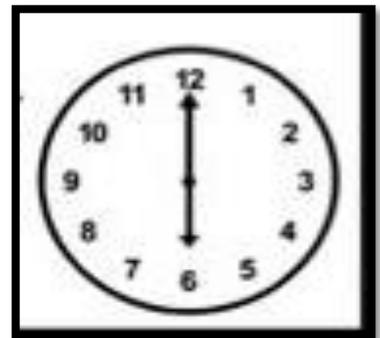
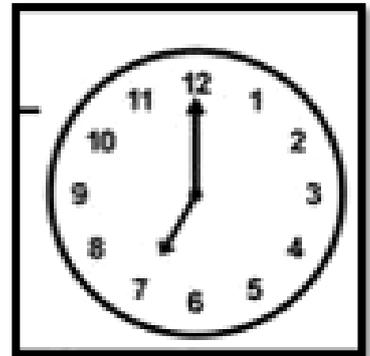
4. ما رأيكم في تشكيل دائرة على شكل ساعة لاختبار قدرتكم على التفاعل مع منهج 'TPR' والتكرار؟

.....
.....
.....
.....
.....

Appendix 05

Pictures of Stimulated Recall Interview Test

Match the times with the suitable pictures:



الملخص

تهدف الدراسة الحالية إلى استكشاف فاعلية التمارين القائمة على الذاكرة العاملة لتعزيز تذكر التلاميذ للمفردات. فالباحث يحقق في طبيعة العلاقة بين الذاكرة ومستوى الاحتفاظ كلمات جديدة. إضافة إلى ذلك، فإن الدراسة تحاول الإبلاغ عن مدى دعم هذه العلاقة من قبل المعلمين والتلاميذ على السواء. الفرضية الأساسية في هذه الدراسة تبين أنه إذا كان المعلمون يستخدمون التدريبات القائمة على الذاكرة العاملة، وهي مجموع الاستجابة البدنية (استعمال الحركات لتقريب الفكرة)، استعمال الأوراق الملونة، وعملية التكرار، فإن متعلميهم سوف تكون لديهم القدرة على الاحتفاظ المفردات. وقد بحث هذا العمل في الأسئلة الرئيسية التالية: ما هي طبيعة التمارين التي يستخدمها معلمو المدارس المتوسطة في اللغة الإنجليزية لتسهيل الاحتفاظ وتذكر المفردات؟ إلى أي مدى تساعد تدريبات المعلمين القائمة على الذاكرة التلاميذ على تذكر المفردات؟ لقد اخترنا طريقة وصفية لوصف متغيرين: "استخدام التمارين القائمة على الذاكرة العاملة" كمتغير مستقل و"مساهمته في تطوير استدعاء المتعلمين للمفردات" كمتغير تابع. من أجل جمع البيانات اللازمة قمنا بإجراء مراقبة الفصول الدراسية لفئات من تلاميذ السنة الأولى متوسط في مؤسسة رويبة محمد غنتار، بأولاد جلال - بسكرة. وبالإضافة إلى ذلك، قمنا بتقديم استبيانين أحدهما للمعلمين (ثلاثة معلمين) والآخر للتلاميذ (أربعين تلميذا). إلى جانب ذلك، لإجراء هذه الدراسة، لقد استخدمنا المنهج النوعي (وصفي) باستخدام وسيلة البحث المتمثلة في "مقابلة الاستدعاء المحفز" هذه المقابلة موجهة إلى عينة من اثني عشر تلميذا من السنة الأولى المتوسط. وتظهر النتائج التي تم الحصول عليها دور التمارين القائمة على الذاكرة العاملة في تحسين استذكار التلاميذ للكلمات. واستنادا إلى هذه النتائج، تم التأكيد على فرضية البحث أن المعلمين بحاجة إلى إتباع واستخدام هذه الممارسة في الفصول الدراسية من أجل تحسين فهم المتعلمين و سهولة بنائهم و تذكرهم للمفردات الجديدة.