Using Keyword – Instruction on Developing Iraqi Intermediate Students' Vocabulary

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The present study aims at using Keyword Based Instruction on Iraqi EFL Second Intermediate Class Students' Vocabulary Performance. The researcher followed the experimental design into which she has randomly chosen a sample being selected from the 2nd intermediate in Muslim bin Osageh intermediate school for boys. The sample of the present study divided into two groups, experimental and control, each of which includes 47 students. The experimental group was instructed through the keyword method and the control group learned vocabulary through the traditional method. The researcher to be used as pre-test and post-test. A T-test formula for two independent samples is used to analyze the obtained data. The results were found that students in the experimental group significantly outperformed the students in the control group in vocabulary performance by keyword method. Overall, this study illustrated that the use of keyword method can largely reduce learners' problems in the acquisition and retention of L2 words. The findings of this research may have pedagogical implications for teachers and learners.

Keywords: Keyword method, mnemonic strategies, vocabulary performance, EFL learners

I. INTRODUCTION

All languages have words. Language emerges first as words, both historically, and in terms of the way each of us learned our first and any subsequent languages. The coining of new words never stops. Nor does the acquisition of word. Even in our first language we are continually learning new words and learning new meanings for old words. (Scott Thornbury.2007, p:1).

'Without grammar very little can be conveyed, without vocabulary nothing can be conveyed'. This is how the linguist David Wilkins summed up the importance of vocabulary learning. His view is echoed in this advice to students from a recent coursebook (Dellar H and Hocking D, Innovations, LTP): '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!'. (Scott Thornbury. 2007, p:13).

Some years ago, a leading authority on second language learning, Wilga Rivers, wrote: Vocabulary cannot be taught. It can be presented, explained, included in all kinds of activities, and experienced in all manner of associations...but ultimately it is learned by individual. (Scott Thornbury. 2007, p:144).

Ringbom, (1983) states that the basic problem seems to be that English vocabulary consists of a large number of different items, which are layered according to the contexts in which they appear. In other languages, the number of basic items is smaller, but there is more of a 'system' for inventing new words. (Norbert Schmitt, 2010, p. 48).

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Among all the vocabulary learning strategies, one of the best and most effective strategies in improving both immediate and delayed retention of second language words is the keyword method (Atkinson: 1975).

Learners today are driven and dictated by technology in their daily lives so firmly gripping the same old traditional teaching is not enough anymore, for we need to integrate technology and innovation into our teaching routine so that we can grasp the attention of learners towards the material being presented, one of these technique is the keyword method. (Abbas, et all (2018).

The keyword technique is used to help link the form of a word to its meaning, and so can be brought into play once the learner has access to the meaning of the word. (Norbert Schmitt, 2010, p: 44)

Mnemonic devices play an important role not only in the course of learning words but also in remembering them (Koksal:2013a).

In language programs the world over, teachers recommend a variety of mnemonic techniques for L2 vocabulary learning (Merry, 1980; Nathinger, 1988) and learners frequently learn lists of vocabulary whether encouraged to do so or not (Carroll, 1963; Rodgers, 1969; Nation, 1987). They do it because it works: without too much effort the student can learn well over30 words per hour by studying lists of vocabulary (Thorndike, 1908; Webb, 1962; Crothers & Suppes, 1967; Nation, 1982; Krashen, 1989). (Nick Ellis, 1994, p. 256).

1.1. Statement of the Problem

2nd intermediate class male pupils seem to face difficulty in English vocabulary performance.

The problem of the current study can be stated in the following main question:

-What is the effect of Using Keyword Based Instruction on Iraqi EFL Second Intermediate Class Students' Vocabulary Performance?

1.2 Hypothesis

The null hypothesis of the current research stated that:

There was no statistically significant difference at the level of (0.05) between the mean of the experimental group studied by the keyword method and the average of the control group who are currently studying the development test of the English vocabulary.

1.3. The Aims of the Study

This study aimed at finding out The Effect of Using Keyword Based Instruction on Iraqi EFL Second Intermediate Class Students' Vocabulary Performance.

1.4. Significance of the Study

The significance of this study emerges through the previous studies. Hence, the current study may contribute to:

- Directing the attention of EFL teachers and learners towards the effectiveness of keyword strategy in vocabulary performance.
- 2. Enriching teaching activities that improve English vocabulary through the designed worksheets.
- 3. Providing a teacher's guide that may help teachers to use keyword strategy in teaching new vocabulary to Second Stage Intermediate School Students.
- **4.** Directing the awareness of EFL curriculum designers to integrating both visual and verbal materials in an interacting way in order to enhance retention vocabulary.

1.5. Procedures of the Study:

To answer questions of the study and to test its hypotheses, the following procedures were followed.

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- 1. Reviewing the literature related to English vocabulary performance and keyword method.
- 2. Identifying the vocabulary that was included in the selected units and redesigning them by using keyword method .
- 3. Preparing the teacher's guide that showed the procedures for teaching English vocabulary by using keyword method and validating it by jury members.
- 4. Preparing vocabulary performance test and establishing its validity and reliability.
- 5. Selecting the participants for the study and dividing them according to the design of the study .
- 6. Pre-administering the vocabulary performance test to the groups of the study.
- 7. Teaching the list of vocabulary to the experimental group by using keyword method and to the control group by using traditional method.
- 8. Post-administering the vocabulary performance test to the groups of the study.
- 9. Administering the vocabulary performance test again to the groups of the study after two months from the post-administering.
- 10. Processing the results of the study groups statistically by using the computerized Statistical Package for Social Sciences (SPSS).

1.6. Definition of Terms

a) strategy

procedures used in learning, thinking, etc., which serve as a way of reaching a goal. In language learning, learning strategies is a conscious or unconscious process which language learners make use of in learning and using a language. (C. Richards Jack and Schmidt Richard, (2010)).

b) keyword Method:

The keyword method, a mnemonic device developed by Atkinson (1975), is an efficient method to be used, especially in foreign language instruction. It is a mnemonic strategy created by using a visual cue explaining the meaning of the present information along with evocative information about a word. It is a systematic technique which reinforces the memory. (Koksal: 2013a).

C. Richards Jack and Schmidt Richard (2010:p307) defined **Keyword** as a word that occurs with high frequency in a text, and which usually reflects the topic of the text.

Hauptmann (2004) states that **Mnemonics** are described as the art of refreshing, improving, or developing the memory by artificial aids.

M. Abdel-Majeed (2000) states that **Mnemonics** are basically concerned with the management of the learning process, which according to Meara (1982, p: 106) is "on the periphery of acquiring new vocabulary."

c)vocabulary:

- C. Richards Jack and Richard Schmidt (2010, p:629) defined **vocabulary** as a set of lexemes, including single words, compound words and idioms.
- M.S.D. Samston (2001, p:5) defines **vocabulary**, is too often focused on unusual words encountered in novels, short stories or other materials students are reading in class.

II. LITERATURE REVIEW

Keyword-based Instruction

The strategy of the keyword is based on Dual Coding Theory(DCT). This theory was founded as a General Cognitive Theory), which found fertile ground for its application in the field of reading, writing and vocabulary learning.

This theory stemmed from the verbal and nonverbal influence on the work of memory. In general, in memory efficiency, as well as in the use of words that are highly imaginative, Pavio pointed out that if an individual encounters information that can be described verbally, there is a greater chance of processing that information verbally - enciphering it by building "on its verbal meaning - The In the first case, the processing rate is relatively slow, and the memory device is fairly low. This explains the memory superiority in the case of shapes than in the case of abstract verbal information (Essam Ali El Tayeb, Rabea Abda Shaaban, 2006, 66).

(Mark Sadoski and Allan Paivio, 2004, 3) point out that the main principle of binary coding theory is that the reader or individual generally has a set of external experiences acquired. These experiences may be linguistic or non-linguistic experiences. Two types of encryption are:

- Verbal Code: which is a language based on the use of symbols (words).
- Non-verbal Code: a pattern that depends on the construction of imaginations or imaginations of images in the human mind and is the remains of the first encoder.

(MacoMber, 2001, 19-20) points out that Paivio's Dual coding theory has considered knowledge as activity, and this activity is the symbolic representation

of different systems that interact with the realist environment. This theory combines two things:

- Verbal representation: It is the most powerful and advanced component in Coding Abstractions, which is integrated
 with special word processing and language in general.
- Non-verbal representations: This type deals with the physical elements, or spatial aspects, and the former two types interact in an integrated and parallel way to form mental images, and this theory (binary encoding) has indicated that the composition of the meaning or extraction (understanding) consists Of the relationship between the external stimuli, and verbal or nonverbal representations, which internalize the inner self images of the individual.

Thus, (Shaker Abdul Hamid, 2008, 319-320), pointed out that the human mind is able through symbols to make sense, and to extract meaning also on scattered information, scattered subjects, and divergent objects, so symbols are means To understand, and to establish the relations between what is inside man, and what exists outside, between the natural world and the human world, between the limited world and the unlimited world. (Abdel Bari Shaaban Maher. 2010, p: 307-308)

Zeynab Khalafi, Mohammad Reza Oroji (2016)

This study investigated the impact of using Keyword Method on Iranian Intermediate EFL learners' vocabulary learning and memorizing. To achieve this end, 40 female students were selected from one English Language Institute in the form of two intact groups with the same number of students, namely control and treatment groups. The purpose was to teach them forty selected vocabulary items from 504 essential words for TOEFL during one semester. To do so, for the treatment group, the researcher made a booklet including the English words with their Persian keywords for the students, but the control group lacked this booklet. The data obtained through pre-test, post-test and delayed post- test were analyzed via a number of t-tests.

The results of the data analysis indicated that the keyword method had a significant effect on both learners' vocabulary learning and retention. Most of the learners believed that their classroom turned into an interesting atmosphere by adding a little flavor of fun and motivating students.

i. METHODOLOGY AND PROCEDURES

3.1. The equivalence of the two research groups:

That the experimental and experimental groups are equal in some variables or characteristics that are believed to affect the dependent variable and limit the extraneous factors. The researcher is keen to equate the students of the two groups of research statistically with the following variables:

- 1. degrees of English language for the first semester of the academic year (2019 2020).
- 2. The student's age is calculated in months.
- 3. educational achievement of parents.
- 4. Educational achievement of mothers.

Here is an explanation of this and as follows:

1 - grades of English language for the first semester of the academic year (2019 - 2020):

The researcher obtained the grades of the research sample in the English language for the first semester of the school administration (Muslim bin Osageh). When calculating the mean score, the experimental group reached (9,76) and the control (9,44). Table (1) shows that:

Table (1) Mean, Standard Deviation, and T-values of the Students' Post-test for the Experimental and Control Groups:

Groups	No.	Mean	Standard Deviation	Degree of Freedom	T-values Calculated	T-values Tabulated	Significance Level
EG	45	9.76	4.48	88	0.32	2.00	0.05
CG	45	9.44	4.67				

Table (1) shows that the calculated T value of 0.32 is smaller than the table T value of (2.00) at the degree of freedom (88) and the significance level (0,05). This indicates that there is no statistically significant difference Between the two groups indicating that they are equivalent in English for the first semester.

3.2 The chronological age calculated in months:

The researcher obtained the age of the students from the school administration, relying on the school card, and the students themselves,

When calculating the mean age of the two groups, the average age of the experimental group (9.76) and the mean age of the control group (8.78). Table (2) illustrates this:

Table (2)

Shows the T value of the age of the two groups of research calculated in months

Groups	No.	Mean	Standard Deviation	Degree of Freedom	T-values Calculated	T-values Tabulated	Significance Level
EG	45	9.76	4.48	88	1.06	2.00	0.05
CG	45	8.78	4.23				

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3.3 Educational achievement of fathers:

The researcher obtained data on the educational achievement of parents from two sources:

- a The school card.
- b Students themselves.

By using the Chi-square (X2), the results showed that the calculated value of X2 was 1.22, which is smaller than the value of Chi-Square (x2) of the scale (7,81) at the freedom level (3), the level of significance (0.05) Indicating that the two research groups are statistically equivalent. Table (3) illustrates thi

Table (3)

The repetitions of students' academic achievement of the two groups of research, and the value of Chi-Square (X2) calculated and tabular

Groups	No.	Frequent Reads and writes And primary	ncy of academi			The legree of reedom	Chi-S	alue of quare Tabul- ited	Level of significance (0.05)
EG	45	11	8	10	16	3	1.22	7.81	0.05
CG	45	13	11	9	12				

3.4 Educational achievement of mothers:

In the same way as in collecting data, the researcher obtained the mothers' collection of Chi-Square (X2), the results showed that the calculated value of K2 (x2) is smaller than the value of (x2) of the scale (7.81) at the degree of freedom (3), the level of significance (0.05), Indicating the equivalence of the two groups of research in the educational achievement of mothers. Table (4) illustrates this:

Table (4)

Frequency of academic achievement of the mothers of the students of the two research groups, and the value of Chi-Square (X2) calculated and tabular

Groups	No.	Frequen	cy of academic	c achievement (of mothers	The degree of		The value of Chi-Square	
		Read sand writes And primary	Middle	Ť	Institute, College and ibove	freedom	Calcu- lated	Tabul- ated	(0.05)
EG.	45	9	10	12	14	3	1.04	7.81	0.05
CG.	45	13	10	10	12				

3.5 Pilot study

For the purpose of the interview, the researcher applied the test on Thursday (22-1-2019), at (10:00 am) on a sample of 100 students from the second-grade students from the same research community (for students, Indicates that the average time taken to answer is 22 minutes. Where the average time taken to answer is extracted by the following method: Test time

= The last time of the answer for the first student + second + ... Total number of students

3.6 Statistical analysis of the test items:

The purpose of the analysis of the test paragraphs is to verify the veracity of each item and to improve its quality by detecting very weak, hard or non-distinctive, and excluding them from invalid ones (Scannell, 1975, P21).

Therefore, the researcher conducted the statistical analysis to extract these characteristics on the same sample of the survey application (100) students, as follows:

1- Items Difficulty:

After calculating the difficulty coefficient for each of the test items, it was found that it ranged between 0.27 and 0.58. The return (1985) indicates that if the rate of difficulty is between (0.20 - 0.80) Acceptable (return, 1985, p. 297). Therefore, the items of the test are all acceptable, and the total number of items (30) item, and table (5) shows that:

2- The power of discrimination of items:

After calculating the coefficient of discrimination of the test items by applying its equations, it was found to be between 0.37 and 0.66, where the item is acceptable if the coefficient of discrimination is greater than 0.30. Thus, the test paragraphs are all acceptable, The total number of items (30) item.

Table (5)

Difficulty and discrimination coefficients for post-test achievement in English

	Difficulty		Difficulty		Coefficient of		Coefficient of
NO.	coefficient	NO.	oefficient	NO.	discrimination	NO.	liscrimination

1	0.27	16	0.45	1	0.57	16	0.54
2	0.49	17	0.35	2	0.63	17	0.59
3	0.41	18	0.46	3	0.41	18	0.56
4	0.48	19	0.36	4	0.62	19	0.47
5	0.53	20	0.34	5	0.41	20	0.42
6	0.47	21	0.48	6	0.39	21	0.59
7	0.46	22	0.46	7	0.62	22	0.41
8	0.37	23	0.55	8	0.56	23	0.37
9	0.51	24	0.46	9	0.64	24	0.56
10	0.36	25	0.50	10	0.57	25	0.56
11	0.54	26	0.55	11	0.66	26	0.37
12	0.46	27	0.56	12	0.37	27	0.46
13	0.52	28	0.38	13	0.53	28	0.57
14	0.44	29	0.37	14	0.44	29	0.39
15	0.45	30	0.58	15	0.56	30	0.45

ii. THE RESULTS

The null hypothesis of the current research stated that:

There was no statistically significant difference at the level of (0.05) between the mean of the experimental group studied by the keyword method and the average of the control group who are currently studying the development test of the English vocabulary.

To achieve this hypothesis, the researcher extracted the arithmetic mean and the variance of the scores of the students of both the experimental and control groups in the post-test, using the T-test of the two independent samples (t- test). Table (1) shows that:

Table (6)

The calculated (T) and (T) values of the students of the experimental and control groups are shown in the post-achievement test

Groups	No.	Mean	Standard Deviation	Degree of Freedom	T-values Calculated	T-values Tabulated	Significance Level
Post-test	45	15.13	4.67	88	5.11	2.00	
Pre-test	45	10.18	4.51				

Table (6) shows that the experimental mean for the experimental group was 15.13, which is greater than the mean for the control group (10.18). By using the t-test for two independent samples, (5,11), which is greater than the numerical value of

(2.00) at the level of significance (0.05) and the degree of freedom (88). This indicates that the experimental group that studied the English language according to the keyword method outperformed the control group that studied the same material in the traditional way.

iii. DISCUSSION AND CONCLUSION

The main purpose of this study was the keyword method enhanced student's achievement in the experimental group in English vocabulary learning and the students in the experimental group showed that the keyword method increased the students' motivation and their interest towards the lesson.

Pressley and Levin (1981) reasoned that the keyword method might have a facilitative effect on productive retrieval from the moment the unfamiliar responses were integrated or available in memory. The learners were thus pre-familiarised with the unfamiliar target responses. When cued by the definitions, later recall was higher in the keyword than in the free-strategy control condition. Although Paivio and Desrochers (1981, p784) conclude "The keyword method does not have an immediate facilitating effect on productive the new recall, unless response items are already available in memory". Similarly Desrochers and Begg (1987, p. 67) argue, "access with the keyword fragment is insufficient for the reproduction of the whole unfamiliar item unless it has been learned previously" but there are few FL learning situations where the learner knows the words of the FL, their pronunciation and their spelling, but not yet their translations (Cohen, 1987).

In conclusion, the keyword technique can be used to achieve one necessary component of vocabulary learning - the mediation of L1 and L2 forms - but there is some reason for sufficiency of keyword strategies for productive vocabulary learning. Thus Ellis & Beaton (1993a) demonstrate that for effective productive vocabulary learning the keyword technique must be complemented with repetitive practice at producing the L2 word forms. Imagery mediation does not contribute to the lexical productive aspects of L2, but it does forge L1-L2 linkages.

Taking these results together it is clear that it truly matters what learners do in order to acquire the meaning of a new word. Sophisticated metacognitive knowledge allows them to choose suitable cognitive learning strategies appropriate for particular tasks. And the strategies that are relevant to vocabulary acquisition include inferring word meanings from context, semantic or imagery mediation between the FL word (or a keyword approximation) and the L1 translation, and deep processing for elaboration of the new word with existing know –ledge.

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