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## The Effect of Word-Association Activities on EFL Iraqi Pupils' Writing

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#### **ABSTRACT**

The present study aims at finding out the effect of word association activities strategy on Iraqi EFL pupils' writing. It is hypothesis that: There is a statistically significant difference between the mean scores of the control group, who are taught by to the conventional method and the mean scores of the experimental group who are taught by Word association activities in the post writing test. To achieve the aims and verify the hypotheses the Nonrandomized experimental group pretest and posttest design has been chosen. The pupils have been taught during the academic year 2023-2024. A sample consists of (60) pupils in fifth stage at AL-Barudy Preparatory School for Girls distributed into two groups. Group (A) represents experimental group that includes (30) pupils are taught according word association activities. Group (B) represents control group which also includes (30) pupils who are taught according to the traditional method. Both groups have been equalized in such variables from Educational level of parent, English grades achievement in previous schooling year, and the pretest of both groups. A unified posttest which contains six questions are designed to collect data. Face and content validity have been attained. The Items have been analyzed statistically, the discrimination power and difficulty level for each items have been

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calculated . Thus, the whole sample has been exposed to post- writing test . The data collecting from results of the posttest have been analyzed statistically by using T- test of two independent samples. According to the results, there is a statistically significant difference in the mean scores of the experimental group who is taught according to word association activities and the control group who is taught by using the traditional method. Based on the results and obtained conclusions in this study, suitable recommendations and suggestions for further studies are put forward.

Key words: word association, writing, pupils, EFL.

تأثير أنشطة ربط الكلمات على كتابة التلاميذ العراقيين للغة الإنجليزية كلغة أجنبية

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## المستخلص

يعد تدريس استراتيجيات اللغة الإنجليزية أمرًا ضروريًا لكل من المعلم والتلاميذ . تساعد الاستراتيجيات الحديثة المعلمين على تحقيق أقصى قدر من التعاون والإلهام لدى التلاميذ . تهدف الدراسة الحالية إلى معرفة أثر استخدام استراتيجية أنشطة ربط الكلمات في تحسين تحصيل التلاميذ العراقيين في اللغة الإنجليزية لغة أجنبية . تكمن أهمية هذه الدراسة في بناء شبكات دلالية قوية تربط الكلمات بكلمات أخرى مماثلة بحيث يتم تنظيم المفردات بشكل أفضل ، واسترجاعها بسهولة أكبر ، وفهمها بشكل أعمق .تتمثل إحدى ميزات ربط الكلمات في أنها تسمح لك بتذكر الكلمات التي تأتي إليك بسهولة أكبر ، وهي طريقة رائعة لاختبار مدى ضخامة مفرداتك ومدى سهولة توفرها . تهدف الدراسة وتفترض الدراسة يوجد فرق ذو دلالة إحصائية بين متوسط درجات المجموعة الضابطة التي تدرس بانشطة ربط الكلمات في الاختبار القبلي بالطريقة التقليدية ومتوسط درجات المجموعة التجريبية التي تدرس بأنشطة ربط الكلمات في الاختبار القبلي والاختبار البعدي للمجموعة التجريبية غير العشوائية. وقد تم تدريس الطلاب خلال العام الدراسي والاختبار البعدي على مجموعتين : تمثل المجموعة (أ) المجموعة التجريبية التي تضم الإعدادية للبنات موزعات على مجموعتين : تمثل المجموعة (أ) المجموعة الضابطة والتي تضم (30) تلميذأ يتم تدريسهم وفق هذه الدراسة . وتمثل المجموعة (ب) المجموعة الضابطة والتي تضم

أيضاً (30) تلميذاً يتم تدريسهم وفق الطريقة التقليدية . وقد تعادلت المجموعتان في متغيرات المستوى التعليمي لولي الأمر ، وتحصيل درجات اللغة الإنجليزية في العام الدراسي السابق ، والاختبار القبلي . من كلا المجموعتين تم تصميم اختبار بعدي موحد يحتوي على ستة أسئلة لجمع البيانات , تم تحقيق صحة الوجه والمحتوى . وقد تم تحليل الفقرات إحصائياً , وتم حساب قوة التمييز ومستوى الصعوبة لكل فقرة وبذلك تكون العينة بأكملها قد تم تعريضها للاختبار البعدي , وقد تم تحليل البيانات التي تم جمعها من نتائج الاختبار البعدي احصائيا باستخدام اختبار لعينتين مستقلتين و مزدوجتين . وفي ضوء النتائج أوضحت وجود فروق ذات دلالة إحصائية بين متوسطي درجات المجموعة التجريبية التي تدرس على وفق استراتيجية ربط الكلمات والمجموعة الضابطة التي تدرس باستخدام الطريقة التقليدية ، كما يوجد فرق ذو دلالة إحصائية بين متوسط درجات المجموعة التجريبية في التحصيل في الاختبارات القبلية والبعدية . وفي ضوء النتائج والاستنتاجات التي تم التوصيات . وفي ضوء الندائم حسن الدراسة , تم تقديم التوصيات .

## 1. INTRODUCTION

#### 1.1 Statements of the Problem

Overcoming Iraqi pupils' weakness in English can be effectively addressed through word association activities, which can enhance vocabulary retention, understanding, and usage. Pupils learn new words and their meanings through association. By associating words with others, pupils can understand the context in which words are used. Pupils can work in groups to come up with word associations, fostering teamwork and communication skills. Pupils can learn from each other through discussion and collaboration.

## 1.2 Aim of the Study

This study aims at finding out the effect of Word Association activities on EFL Iraqi pupils writing.

## 1.3 Hypothesis of the Study

This study is hypothesized that there is a statistically significant difference between the mean scores of the control group, who is taught by the conventional method and the mean scores of the experimental group who is taught by word association activities in the post writing test.

## 1.4 Limits of the Study

The present study is limited to the following:

- 1- Fifth grade preparatory pupils at Al-Barudy School for Girls.
- 2- Unit two, unit three and unit five in "English for Iraq" text book.
- 3- The academic year 2023/2024.

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## 1.5 Value of the Study

This study is thought to be beneficial to:

- 1- The EFL teachers and college instructors who are required to change their strategies of teaching from conventional method to the new strategies.
- 2- Preparatory pupils to encourages them to practice Word Association activities and increase their long term memory.
- 3- The curriculum designers to include word association activities that enable pupils to practice and develop modern and effective activities to help Iraqi EFL pupils to elevate their level and way of thinking and writing

#### 2. THEORITICAL BACKGROUND

#### 2.1. The Word Association Activities

Word association activities have been used for over a century to study how words are linked in the human mind and to assess vocabulary knowledge. In 1910, the Kent-Rosanoff list of 100 common words was created and used in early word association experiments to distinguish how words were associated in the minds of the mentally ill compared to healthy individuals. Since the mid-1950s, numerous word association studies have been conducted with second language pupils. Researchers have asked for single responses, continuous responses, and restricted associations like synonyms (McNeill, 1966).

Postman and Keppel (2014) assert that word association experiments have been implemented to identify words that are linked in mental lexicons. Word association patterns can assist educators in the presentation of new vocabulary and the assessment of student comprehension. There was a resurgence of interest in the teaching of vocabulary in English language instruction during the 1970s and 1980s. Current theories emphasize the notion that words are interconnected in the mind in semantic fields, with specific types of connections being particularly robust as a result of linguistic patterns.

Today, word association activities are commonly used in speech therapy, special education, and English language learning to build vocabulary, improve word retrieval, and assess how pupils understand and organize prior knowledge. Modern word association activities include sorting pairs of words by whether they go together, matching words to related objects or pictures, and recalling words associated with a stimulus term. Word association activities have progressed from the early stages of psychological experimentation to a tool that is frequently employed to evaluate and teach vocabulary knowledge, particularly in the context of second language acquisition. The fundamental assumption is that the examination of word associations offers a comprehensive understanding of the mental lexicon's structure (Church & Hanks, 1990).

## 2.2. Types of Word association

Word associations can be organized into categories. Schmitt (2000) "speaks of three major categories within word associations, namely syntagmatic, paradigmatic and clang associations." Another way to approach and analyse word associations can be studied in Aitchison's (2003), Words in the Mind. She speaks of four groups which are collocation, coordination, superordination and synonymy. Consequently, there are two ways in which word associations can be divided. Both approaches have benefits and that is why they are

both discussed. Additionally, Aitchison (2003) believes that collocation, coordination, superordination and synonymy are the four most important word association groups, which she bases on replies from word association.

## 2.2.1. Syntagmatic Associations

Crystal refers to Saussure's findings concerning syntagmatic relationships which show that all sentences are built of sequences of symbols which all add to the meaning of the sentence. The chain of symbols can be seen as a syntagmatic relationship; there are links connecting the words which together create a structure (Crystal 1985). McCarthy (1990) explains that syntagmatic associations look at how words come together to create text. Consequently, when people give associations syntagmatically they are combining words which, together, create meaning. Syntagmatic relationships are seen as horizontal, since the following words are decided by previous words in the text (Crystal 1985 & McCarthy 1990). Syntagmatic associations have a tendency to have a different word class than the stimulus (Schmitt 2000).

## 2.2.2 Collocation

A collocation is a relationship between words which are associated because they are likely to be found together in context (Aitchison, 2003). In confirmation of this McCarthy argues that, "the relationship of *collocation* is fundamental in the study of vocabulary; it is a marriage contract between words, and some words are more firmly married to each other than others" (McCarthy, 1990). This means that some words connect with each other more naturally than others. But the words do not necessarily have to lie just next to each other: "Words that commonly occur with or in the vicinity of a target word (that is, with greater probability than random chance) are called 'collocates', and the resulting sequences or sets of words are called 'collocations'" (Reppen & Simpson, 2002). This means that deciding whether two words should be labelled collocations or not can be complicated.

However, as McCarthy (1990:12), points out, some words are strongly tied together and not hard to distinguish as collocations. Carter calls attention to the problem of how to decide what can be called collocation. Any words can in theory come together and collocate. Nevertheless, some words are more likely to co-occur than others. The chances are rather slim of having *guilt* and *mathematics* in connection with each other. On the other hand, the likelihood is great of having *florist* and *flowers* linked with each other in text. A possible approach to solving the problem of which relationships that can be called collocation is to create a set of words which are likely to be found together with a stimulus (Carter, 1998).

McCarthy (1990), uses the colour *blond* to illustrate the phenomenon of collocation. *Blond* can almost only be used to describe hair; it is not acceptable to combine *blond* with *car*. Thus, there is a strong bond between *blond* and *hair* and that means that they collocate. *Bread* and *butter* are also two words which are often combined; this might lead to the conclusion that they get easily connected because both of the words start with the letter *B* and the phoneme [b]. Nevertheless, words like *knife* and *fork* are just as easily linked, which shows that these items are joined because of their meaning (Ashcraft, 1994:291). Aitchison describes some collocation pairs as 'freezes' because they have become fixed. She says that *knife* and *fork* is an example of a frozen pair. Idioms and several words combined to expressions are also examples of collocation and tie in with 'freezes' since they cannot communicate the meaning without the entire expression (Aitchison 2003:91). Nation and Meara (2002) claim that expressions like *good morning* are so strongly collocated that they are treated like one word by speakers. It is therefore no surprise that people often associate such parts of an expression with each other.

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### 2.2.3 Paradigmatic Associations

Paradigmatic relationships stand for symbols in a sentence which have links with symbols absent from the sentence but which exist in the given language. This connection means that words in a sentence can be replaced by other words and still keep the same grammatical form (Crystal 1985). A paradigmatic relationship represents a possibility to choose from more than one word which could be put in the sentence (Crystal 1985 & McCarthy, 1990). The paradigmatic relationship allows the word in the sentence to be substituted in different ways. The most common groups that swap are synonyms, antonyms and hyponyms (McCarthy 1990). These terms will be explained in depth further down. Both McCarthy (1990) and Crystal (1985) display paradigmatic relations as vertical, since there is a choice of swapping a word in a sentence with a not present one. Paradigmatic associations have unlike the syntagmatic associations the same word class as the triggering word, for example walk-go. Because the word class is kept the form of the sentence is kept, although the meaning might differ greatly.

#### 2.2.4 Coordination

Coordination is described by Aitchison (2003) as "words which are linked together because they have the same detail in meaning. Connecting *salt* and *pepper* with each other is an example of coordination as well as linking names of colours together. Opposites are included in coordination since some opposed words only consist of two components as *left* and *right*." However, there are groups of opposites which have more than one possible opposition. In that case the two most striking opposites can be coordinates like *hot* and *cold* (Aitchison 2003). Murphy quotes Lyons (1977) who makes the interesting observation that, "oppositions are drawn along some dimension of similarity" (Murphy, 2003).

Since there is a degree of likeness in opposition Murphy reasons that, "the line between antonymy and synonymy is a fuzzy, context-sensitive one" (Murphy 2003).

Carter (1998), divides antonymic relations into four groups: complementarity, converseness, incompatibility and antonymy. Complementarity means that one word rules out another because the words have no degree, as in *dead* and *alive*. Converseness is a term used for words which correlate with each other, as *buy* and *sell*. The relationship is that if someone buys something then automatically someone else sells something. Incompatibility is when words belonging to the same semantic field exclude each other. Colours and seasons are examples of incompatibility, for instance, if it is July it cannot be August at the same time. The final group is antonymy which can include all of the just mentioned terms or in connection with gradable opposites.

#### 2.2.5 Superordination

Associations which are put under superordination are connections made by putting words into categories. If *pear* triggers *fruit* it is a connection based on superordination (Aitchison, 2003). Carter (1998) explains superordination in terms of hyponymy. Hyponymy is a bond between two words where one is specific and the other wide-ranging. A *robin* can be categorised under the general term *bird*. Hyponyms can be said to be unbalanced synonyms, where the organization is hierarchical. Superordinates are sometimes actually called hyperonyms and the items which can be categorised under the superordinate/hyperonym are normally called hyponyms (Aitchison, 2003). The terms superordination and superordinate will be used in this essay. Words can belong to more than one superordination category which means that arranging words in a superordinate way is presumably impulsive (Aitchison, 2003).

A possibility is that a superordinate triggers words within its category, for instance *pear* given to *fruit*. These items are then called subordinates (Marschark *et al.* 2004). This term may be used for any words belonging to a superordinate-group. There are different views concerning what a relationship of words needs to look like to be considered to have a superordinate bond. According to McCarthy (1990), "semanticists only accept a relationship where one item is a kind of representation of the superordinate. In other words, a *chair* is a type of *furniture*.

## **2.2.6** Synonymy

When two words mean exactly the same thing they are called synonyms, as *donkey* and *ass*. However, the term synonymy is used in a wider extent than that because it is not common for two words to mean exactly the same thing. Therefore, words such as *hungry* and *starved* are called synonyms even though the latter term is stronger than the first (Aitchison 2003). Carter (1998) takes it one step further and says that in reality no absolute synonyms exist; a synonym always contains a minor difference in meaning compared to its partner/s. This does not mean that synonyms are not exchangeable, but only that replacement of a synonym alters the meaning in a context slightly.

Murphy (2003, p. 40), "points out that it is common in many cultures to create synonyms for distasteful vocabulary, for instance *bathroom* and *restroom*. Thus, the meanings of the synonyms are the same but the formality might alter greatly when choosing one before another." McCarthy (1990), also ponders whether true synonyms really exist. It can be questioned if synonyms always can be put in the same context and produce the same precise meaning.

Collinson (1939), referred to by McCarthy, gives an example of how the words *start* and *begin* cannot always replace each other: *The baby starts/begins to scream. The car did not begin. Before the world started, everything was black.* In the first sentence both terms can be used, but in the other two we notice that the sentences seem odd because of the choice of the underlined word (McCarthy 1990). This shows that although words are called synonyms, it is not always certain that it is acceptable to replace them with each other. Murphy explains that there are words frequently referred to as synonyms in dictionaries which are, nonetheless, difficult or impossible to substitute with each other when set in context. Such synonyms are closely connected to some words but not to others. An example of this phenomenon is *heavy traffic* and *thick forest* were *heavy* and *thick* are still to be considered synonyms because of the meaning they transfer (Murphy, 2003).

## 2.2.7 Clang Associations

Clang associations are related to the stimulus when it comes to form but not meaning, for example *save-cave* (Schmitt, 2000). There are different types of clang associations: Responses which rhyme with the stimulus, have the identical first sound and/or comparable structure of a consonant group are all examples of associations based on clang (Meara, 1982). McCarthy (1990), calls attention to the importance of sound in the recognition of words. The beginnings and ends of words seem to be more steadily remembered by our mental lexicon. Especially beginnings of words appear to have a major part when it comes to storing words (Aitchison, 2003).

## 2.3 Advantages of Synonyms

According to Hashim (2023) in his research that published in this magazine :

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Synonyms can enhance word choice, or selecting the best single word or expression for what you are trying to communicate . The first advantage of synonyms is achieved when trying to choose the exact word as a substitute for a certain word. Some languages may have only word for expressing a certain meaning. English, however, uses a variety of words to convey a single meaning, each with its unique subtle distinction. This variety of words is partly ascribed to the existence of loan words that are taken from other languages. Secondly, the other main advantage of synonyms is also to avoid using the same word over and over again because it is always recommended to use the same word as sparingly as possible. Repeating a specific word can constitute a problem, especially, when focusing on a single topic. And most of your sentences or clauses must include words related to the topic. (p. 399, 400)

## 2.4 Concept of Writing

Writing is a part of productive performance to identify and to value one's competency (Hyland, 2003). The productive performance requires physical and mental act (Nunan, 2003). The physical act focuses on some medium to commit the words or ideas on the paper, while mental act hubs on the process of inventing ideas, thinking on how to express the ideas, and organizing them into written expression that will be clear to the reader. Writing is considered as a means of communication as well (Oates, 2000). In writing, certain considerations are important. Suitable strategy in teaching writing is the most important point. How to engage the pupils in writing activities, reviewing previous work of pupils thoroughly and giving feedback to their writing would help pupils to learn as much as possible. Furthermore, most teachers tend to stick on technical matters of teaching writing such as grammar, punctuation, organization, clarity, conformity and coherence. They occasionally fail to remember that pupils are creative writers and need to be heard (Casanave & Vandrick, 2003).

Zimmerman and Rodrigues (1992) say that "writing is much more than letters put together in meaningful patterns. It is a way of thinking, a way of learning, a way of sharing ideas with others." Additionally, Zimmerman and Rodrigues (1992) say that writing is a social activity. It means that writing is related to other people. Other people in this case are called as the reader of the writing. Through the writing product, the writer wants to give a message to the reader. Besides, writing can used to solve problems, to work together on tasks, and to challenge one another's ideas.

This theory is supported by William James's ideas about way of thinking in the writing process. He says that writing is just stream of thought. He says that in the writing thought flows like a stream. He objects the image of thought chopped into segments (Irmscher, 1969).

According to Hornby (1995), "to write means to compose something in written form, to put information on a sheet of paper or in the appropriate places on a form. Writing is both physical and mental act of inventing ideas, thinking about how to express them, and organizing them into statements and paragraphs that will be clear to a reader. One is committing words or ideas then expressing them in a written form. It means that in writing one has process and also the product. The process happens when he/she is thinking about ideas and the way how he/she can express them, while the product of it is the writing itself."

## 2.5 Skills of Writing

According to Mahmood (2018) in his research that published in this magazine :

In order to write, the learner needs a lot of skills to accomplish this task. Writing process involves various aspects, some are mechanical and sophisticated processes involved in written communication. (p. 1502)

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## 2.6 The Importance of Writing

Among the other skills, writing is seen to be a very basic requirement for human being since it goes in connection with his/her daily life. So, writing as a craft goes in parallel with human life since people need it to fulfil their different transactions. It has been used for accomplishing many jobs in our daily life since the old centuries of human life. However, "writing as a creative activity has been a regular paid form of employment only in recent centuries" (McArther, 1992).

Moreover, rather than being a craft and a creative activity as well, writing is seen, according to Bacon, as a distinctive feature that distinguishes an exact man from the normal one. This is clearly seen in his explanation of the importance of such a skill in comparison with the other skills. He states that "reading make a full man, conference a ready man and writing an exact man" (cited in Mandal, 2009). In this regard, English is a global language. Crystal (2003), in his book, "English as a Global Language," states that "English is now so widely established that it can no longer be thought of as "owned" by any single nation". So, English is now a language of intercultural communication among different people all over the world. To realise this intercultural communication, writing in English plays an important role.

Similarly, Rao (2007) appreciates the value of writing in the pedagogy of English as a foreign language (EFL). He points out that writing "stimulates thinking, compels pupils to concentrate and organize their ideas, and cultivates their ability to summarize, analyze, and criticize. On the other hand, it reinforces learning in, thinking in, and reflecting on English language". Similarly, Gebhardt and Rodrigues (1989:76) ascribe the importance of writing to the fact that it integrates both of brain and sense or thinking and writing at the time of composing. In another study, Raimes (1985) suggests that writing should not be seen as just one of the language skills to be learnt but also as an efficient way for generating language. Thus, she views that writing is also an important tool for language learning. In this regard, Hedge (1988) argues that it is "an aid to learning". Similarly, Reid (1993) suggests that "writing is a form of learning". For Harmer (2004), "it may provoke language development". In the same direction, Klein et al. (2007) find that "writing contributes significantly to learning during analogical reasoning".

As it is important for learning and pupils, writing is also significant for teaching and teachers. Effective teaching requires different skills that involve writing (Burton, 2009). As a matter of fact, writing plays important roles in different teaching activities such as "planning lessons, jotting down ideas, taking messages, marking pupils' assignments, drafting class reports, editing drafts of texts, critiquing course books, designing units of work, note-taking, recording the gist of meeting, filling in assessment sheets, making journal entries, sending emails, writing up projects ... and so on". Furthermore, "writing offers teachers a way to learn about what they do". Thus, writing is important for teaching in that it helps teachers in different aspects and stages of teaching (Burton, 2009).

#### 2.7 Types of Writing

Brown (2001), proposes five major categories of classroom writing performance. They are as follows:

#### 1. Imitative

This type of writing is usually for the beginners, in which they simply write down English letters, words, and possibly sentences to learn the conventions of the orthographic code.

#### 2. Intensive

Pupils produce language to endorsement their competence in grammar, vocabulary, and sentence formation.

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## 3. Display Writing

This type of writing is more focused on task-based responses in which pupils are responding to a prompt or assignment.

## 4. Real Writing

The purpose of this type of writing is to exchange useful information. Since the different writing may have different purposes, the teacher should able to give the pupils a clear understanding of the types of writing performance so that the pupils could differentiate and recognize which types their writing belongs to.

## 5. Self-writing

Self-writing is a writer with only the self in mind as an audience. Diary or journal writing and note-taking can be categorized in this kind of writing in which they take note for something for the purpose of later recall (Brown, 2001).

## 3. PREVIOUS RELATED STUDY

This section includes the previous studies which are related to the study. They are arranged chronologically from the earliest to the most recent ones as follows:

## 3.1 Barrow (2011).

The aim of this study is to explore the L1 and L2 mental lexicon and how L1 and L2 speakers find words they want to use.

The sample consists of 10 children who have English as a first language and 10 children who have English as a second language; a sample of this number used lexical links which are investigated. The instruments are both qualitative and quantitative data collection methods.

The results of this study show that the L2 mental lexicon is not structurally different or inferior to the L1 lexicon. It is in a developmental stage and is not a fully developed process as the L1 mental lexicon.

## 3. 2 Fitzpatrick and Izura (2011).

The aim of this study is to find out (a) some response types are produced more often or faster than others, (b) participants' L2 response time profiles mirror those of their L1, and (c) participants' L2 association responses are mediated by their L1 and modulated by proficiency.

The sample Twenty-four native Spanish speakers (19 females and 5 males), who start to learn English as a L2 at a mean age of 9 years old, take part in the study. Participants are an average of 26 years old (range: 20–49). The instrument of this study is Eurocentres Vocabulary Size Test (EVST). The EVST is a receptive vocabulary size test that has shown high correlations with other measures of L2 proficiency. The test consists of a combination of real words (of different frequencies) and invented words.

Results indicate that responses are faster when a double association link is produced that is, when the response is associated by form and meaning (postman  $\rightarrow$  postbox) or meaning and collocation (spider  $\rightarrow$  web).

#### 4. EXPERMINTAL DESIGN

The aims of the present study and hypotheses are demanded for the use of "Non-Randomized" Pre- Post-test Design" the two groups of Fifth grade preparatory school pupils are the sample of the study. The experimental design of the study is illustrated in table (1).

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Table (1)

## The Design of this Study

Groups	Pre-test	Independent Variables	Dependent Variables	Posttest
Experimental Group	Pre-test	Word -Association Activities	Writing skills	Writing test
Control group		Prescribed teaching method in teacher's guide		

## 4.1 Population and sampling of the Study

Lehman and Mehrens (1971) assume that population presents the group in general and the number of individuals that it contains in particular. Also Best and Kahn (2006) mention that population is a group of individuals with at least one common characteristics that distinguishes the group from other individuals. The population of the current study consists of EFL Preparatory pupils of the fifth scientific stage for girls in Tikrit center during the academic year 2023-2024. The total population number of fifth grade pupils are 80 girls distributed into nine preparatory schools for girls in Tikrit Center.

The sample refers to any group of individuals that is selected to symbolize a population ( Richards et al, 1992 ) .

The sample is a small proportion of pupils chosen for analysis and observation (  $Best,\!1981$  ) . In order to achieve the aim of the study , the researcher has randomly selected AL-Barudy Preparatory School for Girls to be the sample of the study , during the academic year 2023-2024 . The pupils are distributed into two sections (  $A,\,B$  ) .

Section (A) has been chosen randomly to be the experimental Group, which consists of (30) pupils.

Section (B) has been also chosen randomly to be the control group, which includes (30) pupils. Thus, the total number of the sample is (60) pupils, as shown in table (3).

Table 2
The sample

Sections	Groups	No. of sample
A	Experimental	30
В	Control	30
Total		60

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## 4.2 Equivalence of the Two Groups

The equalization between the two groups requires controlling the following variables which may cause a variance in the pupils writing such as, their age, their parents' educational attainment, and pupils previous year degrees in English language (Good, Barr and Douglas, 1976).

#### **4.3** Construction of the Post writing test

To achieve the aims of the study, an achievement post-test has been constructed . Khader (2016) states that a test is based on what the pupils have learned and should be administered in a correct manner . Mcnamara (2000) indicates that the achievement test is limited to specific material covered in curriculum within a question it can assist as assign of features that a pupil needs to work in the future . The primary role of an achievement test is to determine the achievement of course objectives at the end of a period of instruction. An achievement test provides teaching to which it relates .

## **4.4 Validity of the Posttest**

Validity refers to the exam's truthfulness, and it is essential because pupils need to be confident that the test is actually testing what it promises to test (Brown, 2001). It means whether a measure is truthful or genuine. In other words, a measure that is valid measures what it claims to measure (Jackson, 2009).

Gronlund (1998) defines validity as the relevance, meaning, and usefulness of conclusions drawn from evaluation results in terms of the purpose of the evaluation.

Harmer (2006) states that the test should measure what it is designed to measure. It refers to how generalizable the conclusions gained from a small sample are to a higher population.

## 4.5 Difficulty Level and Discrimination Power of the test item

Item difficulty refers to the extent to which an item appears to be complicated or facilitated for a given number of tests. It just reflects the percentage of pupils who respond correctly to the object. The most suitable test item will have item difficulty varying between 0.20 and 0.80 (Brown, 2010).

Item difficulty refers to the measurement device that measures the Pupils' failing or passing in a specific item ( Devellis , 2003 ) .

It is found that the current test items' DL ranges from 0.40 to 0.67, which is accepted as shown in table (12).

Discrimination power means the degree to which an item differentiates between high and low ability testees. It is very essential because if the test items can discriminate more, they will be more reliable ( Hughes, 2005 ) .

The degree to which an item may distinguish between successful test takers and unsuccessful test takers is known as item discrimination. If an item gathers the correct answers from the excellent Pupils and the incorrect responses from the weak Pupils, it has a strong capacity for discriminating.

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## **4.6 Scoring Scheme of the Posttest**

The researcher used O'Malleyand Pierce's ( 1996 ) analytical scoring scheme to score the writing test. The questions (1 , 2 , 4 , 6) scores out of 15 scores , The question ( 3 ) scores out of 10 scores , The question ( 5 ) scores out of 30 scores Therefore, the total scores of the posttest are ( 100 ) .

#### 5. THE RESULTS

# The aim of study refers to find out the effect of word association activities on EFL Iraqi pupils writing

To find out if there is any significant difference between the mean scores of the experimental group and that of the control group in the posttest, all mean scores are obtained and compared. Statistical means shows that the mean scores of the experimental groups are (65.93) and that of the control group is (57.23), with standard deviations (8.61) and (10.75) respectively. By using the t-test formula for two independent samples, the calculated t-value is found to be (3.42), while the tabulated t-value is found to be (2.00) at the degree of freedom (58) and level of significance (0.05), This indicates that there is a significant difference between mean scores of experimental and control. Thus, the hypothesis which states that there is a significant difference between the mean scores of the experimental group and that of the control group in the posttest is verified, as shown in table (3).

Table (3)

Means, Standard Deviation, and t-Values of the Two Groups

in the Achievement Test

Groups	No. of pupils	Mean	SD.	T-Value		DF	Level of Significanc e
EG.	30	65.93	8.61	Calculated	Tabulated	58	0.05
CG.	30	57.23	10.75	3.42	2.00		

#### **5.1 Discussion of Result**

The aim of the current study is to determine whether the Word -Association Activities have an effect on EFL Iraqi pupils writing skill . Also, it seeks to identify any significant difference in pupils mean scores of the experimental and control groups . The results show that the experimental group, who are taught by using the Word - Association Activities, achieves higher and better levels of writing than the control group , who are taught by using conventional method. Previous research focused on employing the Word - Association Activities in various contexts, while the current study aims to determine how the strategy affected the pupils writing skill of Iraqi EFL pupils. The examination of earlier studies demonstrates that the Word -Association Activities is still effective even when various methodologies are used for each investigation on the performance of four skills by

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pupils. Also, the outcomes of the present study support those of earlier investigations. Pupils who employ the Word -Association Activities perform significantly better than those who use the traditional method. The pupils in the experimental group who have experienced the Word - Association Activities writing are able to communicate with one another in the classroom.

While employing the Word -Association Activities to teach English, the following elements can be linked to the considerable disparities in pupils ' English language achievement:

- 1. In the post-test, pupils in the experimental group who have been exposed to the Word - Association Activities perform better than pupils in the control group who are taught by using the conventional method.
- 2. Pupils learn new ideas, evaluate them, and interpret what they mean. The ability of the pupils to access meanings and make connections between languages will grow as a result of this.
- 3. the Word -Association Activities makes the pupils able to keep the new words in their memory.
- 4. Collaborative learning will encourage pupils to review facts and work in pair groups with their friends.
- 5. Non-linguistic forms like pictures and cards encourage pupils interaction
- 6. the Word -Association Activities improves pupils 'confidence in their process of learning.

## 6. CONCLUSIONS

Based on the results of the current study, word association activities strategies have been found positively effective on improving pupils writing. The aim is to investigate the effect of word association activities strategy on Iraqi preparatory pupils' writing. After analyzing and collecting data, the result of scores show that the pupils who have been taught by word association activities is better than pupils that used conventional method and word association strategy. Building on the results of the current study, the following conclusions have been drawn:

- 1- The meaningful learning strategy plays a word association activities role in improving preparatory school pupils' writing skills.
- 2- Pupils of the experimental groups are better than pupils of the control group, which indicate that those pupils have positively responded to these strategies. Word association activities strategy is an effective strategies that stimulate pupils' creativity in learning and arises motivation by using: concept map, flashcards, highlighted pen and visual images.
- 3- The teaching by using word association activities strategy is better for pupils because it relate the new knowledge they have learnt with previous knowledge.
- 4- Words Assocition has an impact on more than just academic achievement in the classroom. Pupils who are given the opportunity to learn and succeed are more likely to appreciate tenacity, have faith in their talents, and understand their own learning needs.
- 5- Pupils show high motivation and desire in learning English when they have been exposed to this new strategy. This is enough to make the process of teaching fruitful.

6- The results from t-test reveal that using word association activities strategy in teaching has been achieved a significant effect on Iraqi preparatory pupils' writing .

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