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The Effectiveness of Using PAVE Strategy on Learning English Vocabulary and its Retention among Eleventh Graders

**فعالية استخدام استراتيجية PAVE في تعلم مفردات اللغة
الإنجليزية واستبقائها لدى طالبات الصف الحادي عشر**

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إقرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

The Effectiveness of Using PAVE Strategy on Learning ESL Vocabulary and its Retention among Eleventh Graders

**فعالية استخدام استراتيجية PAVE في تعلم مفردات اللغة الإنجليزية واستبقائها
لدى طالبات الصف الحادي عشر**

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نتيجة الحكم على أطروحة ماجستير

بناءً على موافقة شئون البحث العلمي والدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحثة/ أسماء محمود عبد الرحمن بدر لنيل درجة الماجستير في كلية التربية/ قسم مناهج وطرق تدريس وموضوعها:
في تعلم مفردات اللغة الإنجليزية واستبقائها لدى PAVE فعالية استخدام استراتيجية طالبات الصف الحادي عشر

The Effectiveness of Using PAVE Strategy on Learning English Vocabulary and its Retention among Eleventh Graders

وبعد المناقشة العلنية التي تمت اليوم الإثنين 10 رمضان 1438هـ، الموافق 2017/06/05م الساعة الحادية عشر صباحاً بمبنى اللحيان ، اجتمعت لجنة الحكم على الأطروحة والمكونة من:

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وبعد المداولة أوصت اللجنة بمنح الباحثة درجة الماجستير في كلية التربية/قسم مناهج وطرق تدريس.

واللجنة إذ تمنحها هذه الدرجة فإنها توصيها بتقوى الله ولزوم طاعته وأن يسخر علمها في خدمة دينها ووطنها.

والله ولي التوفيق ،،،

نائب الرئيس لشئون البحث العلمي والدراسات العليا

أ.د. عبدالرؤوف علي المناعمة

Abstract

This study aims to investigate the effectiveness of using PAVE strategy on learning English vocabulary and its retention among eleventh graders in the north of Gaza.

To answer the research questions, the researcher adopts the experimental approach and applies the experiment on a random sample consisting of (72) eleventh graders from 'Tal Al Rabee' Secondary School for Girls in Beit Lahia. The researcher distributed the sample equally into two equivalent groups (experimental and control): each of which consists of 36 students. The experimental group was taught via PAVE strategy, while the control group was taught via traditional method in the first term of the school year (2016-2017).

The researcher designed an achievement vocabulary test, and then she investigated its validity to be used as a pre-post and delayed test in learning English vocabulary among eleventh graders. After that, she analyzed the data using t-test independent sample and t- test paired sample to determine statistically significant differences between the groups and inside the group itself. Eta square formula was also used to measure the effect size of PAVE strategy on the experimental group in the test.

The findings show that there are statistically differences at ($\alpha \leq 0.05$) between the mean scores of the experimental group and those of control group and hence the effectiveness of using PAVE strategy on learning English vocabulary and its retention is proved.

In the light of the study findings, the researcher recommends using PAVE strategy as an effective tool in learning vocabulary and increasing its retention among eleventh graders. The researcher also recommends conducting more studies about the effectiveness of using PAVE strategy on learning English in general and vocabulary in particular.

ملخص

تهدف هذه الدراسة إلى التحقق من أثر استخدام استراتيجية PAVE في تعلم مفردات اللغة الإنجليزية واستبقائها لدى طلبة الصف الحادي عشر في شمال غزة.

وللإجابة على أسئلة الدراسة، استخدمت الباحثة المنهج التجريبي وطبقت الدراسة على عينة عشوائية مؤلفة من (72) طالبة من طالبات الصف الحادي عشر في مدرسة تل الربيع الثانوية للبنات في بيت لاهيا. قامت الباحثة بتوزيع عينة الدراسة على مجموعتين متكافئتين، حيث تكونت كلا من المجموعتين من (36) طالبة. قامت الباحثة بتدريس الكلمات الجديدة للمجموعة التجريبية باستخدام استراتيجية PAVE أما المجموعة الضابطة فتم تدريسها بالطريقة التقليدية أثناء الفصل الأول من العام الدراسي 2016-2017م.

وقد قامت الباحثة ببناء اختبار تحصيل للكلمات قبلي وبعدي ومؤجل لجمع البيانات اللازمة ثم تم التحقق من صدقه وثباته. تم تحليل بيانات الدراسة من خلال استخدام اختبار (ت) للعينات المستقلة لتحديد الفروق الإحصائية بين المجموعتين واختبار (ت) للعينات المرتبطة لتحديد الفروق الإحصائية بين المجموعة التجريبية نفسها قبل وبعد التجربة. وتم استخدام مربع إيتا لقياس حجم أثر استراتيجية PAVE على تحصيل المجموعة التجريبية في الاختبار.

أهم النتائج:

1- وجود فروق ذات دلالة إحصائية عند مستوى دلالة ($\alpha \leq 0.05$) بين المجموعتين التجريبية والضابطة في تعلم مفردات اللغة الإنجليزية واستبقائها لصالح التجريبية تعزى إلى استخدام استراتيجية PAVE. وبالتالي تؤكد هذه النتائج على الأثر الفعال الناتج عن استخدام استراتيجية PAVE في تدريس مفردات اللغة الإنجليزية واستبقائها.

ومن أهم ما توصي به الباحثة:

- ضرورة استخدام استراتيجية PAVE في تدريس مفردات اللغة الانجليزية لدى طلبة الصف الحادي عشر واستبقائها.
- ضرورة إجراء المزيد من الدراسات التي تتعلق باستخدام هذه الاستراتيجية في تدريس اللغة الإنجليزية بشكل عام والمفردات بشكل خاص.

قال تعالى:

(يَا أَيُّهَا الَّذِينَ آمَنُوا إِذَا قِيلَ لَكُمْ تَفَسَّحُوا فِي الْمَجَالِسِ فَافْسَحُوا

يَفْسَحِ اللَّهُ لَكُمْ وَإِذَا قِيلَ انشُرُوا فَانشُرُوا يَرْفَعِ اللَّهُ الَّذِينَ آمَنُوا

مِنْكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ وَاللَّهُ بِمَا تَعْمَلُونَ خَبِيرٌ)

[المجادلة: 11]

Dedication

I would like to dedicate this work to

my beloved country, Palestine,

my dear father, who encourages me to pass this way firstly and sacrifices a lot to bring
me so much happiness

my dear mother, who floods me with her kindness, and her permanent prayers

my dear brothers and sisters, who are my support in this life

my sincere friends

martyrs, and detainees, an samples of sacrifice,

the Islamic University of Gaza, the source of knowledge and science, and to

all those who have their fingerprints in completing this work successfully

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List of Abbreviations

PAVE: Prediction – Association – Verification – Evaluation

ELLS: English Language Learners

EFL : English as a Foreign Language

AFL: Arabic as a Foreign language

ELT: English Language Teaching

CGS: Contextual Guessing Strategy

PWIM: Picture Word Inductive Model

KWM: Keyword method

Chapter I

Background of the Study

Chapter I

Background of the Study

This chapter focuses on the background of the study including the introduction, the statement of the problem, the study questions and hypotheses, the significance of the study, the purpose of the study, the need for the study, limitations and definitions of terms.

1.1 Introduction:

Nowadays English is considered a global language. It is spoken both as a native and as a second or foreign language. It is taught in many schools in almost every country in the globe. It is considered a living language as over 300 million native speakers use it to communicate and millions more of nonnative speakers use it to communicate as an additional language (Thirumalai and Mallikarjun, 2002). Since the power of Latin in the West, the English language is roughly considered the world's second language more than any other language. Today, 23 countries with a population of 500,000,000 use English as the official or first language. In addition, other 25 countries with more than 900,000,000 use it as second language. As the best estimates show, 50,000,000 elementary school students and 75,000,000 high school students are currently studying English as a second language. Moreover, there are millions more of the adult and college/university levels who are studying English". (Lane,2009).

English has an important role in different walks of our lives. Regarding this fact, a great attention has been given to second language learning. Thus, mastering English is an important thing as researches show that knowledge of English offers a good job, a better salary, an advanced knowledge, and more flexible communication with people who have different nationalities so that English is learned everywhere. Another reason for learning English is that it has a rich literature and provides the learner with a good and varied experience. Moreover, English has replaced French as the language of diplomacy(Thirumalai and Mallikarjun, 2002).

Being fluent in English can open the door for many opportunities. Research suggests that learning English is useful in applying for a job as it enhances the applicant's CV. "Some businesses that deal with international clients and suppliers

rely on English-speaking employees to help with day-to-day operations to interpret, translate and communicate directly with English-speaking customers and clients. Being fluent in English can improve employment opportunities. In addition to job opportunities, there are other opportunities available for those who learn English. Learning English can improve the chances of being accepted into advanced training programs or colleges in English-speaking countries. Learning English also can expand the ability to access news and information, much of which is generated only in English"(Romano, 2017).

To sum up, the importance of learning English as a second language, "just as Latin was the dominant language for 1000 years and French for 500 years, today English is the access tool to enter this world in all fields such as (knowledge, commerce, and culture)in a way that other languages do not. It is considered the key to participating in the global conversation" (Importance of Learning a Second Language, 2013).

Second Language Acquisition(SLA) is considered an important phenomenon for most of students as many researches are conducted to discuss it and clarify the theories behind it. Second language acquisition refers to the way in which students learn a second or an additional language (L2) to their mother tongue (L1). Any language, that is taught after the first one is called a second language (SL) even if it is the second, the third or the fourth one. Therefore, any other language that isn't native one is referred to as a second language (SL) or a target language (TL). Actually, when speaking on this subject, a lot of people confuse Second Language with Foreign Language. Thus, it is important to distinguish between them. As for the Collins Dictionary, the second language is the language which people learn after their mother tongue, while the foreign language is the language which is spoken in a country other than one's native country (2013). People acquire second languages in different ways either formally or informally. An example of the formal way is the classroom environment while the example of the informal way is the multiple exposures to the target language through attending school, watching local TV, listening to radio, and reading newspapers. One more important thing in acquiring language is practicing the target language through being involved in the learning settings and normal daily routines. Based on the previous lines, learning English as a second language needs a lot of efforts especially in the classroom environment.

Vocabulary is an important field of a language. When a person needs to communicate and express meaning, he must use vocabulary. Also, vocabulary knowledge is very useful and essential in developing the four language skills (reading, speaking, writing, and listening) so teaching vocabulary deserves a lot of efforts. Recently a lot of researches recommended and emphasized the importance of vocabulary learning and teaching.

Learning vocabulary is more than knowing its meaning. To have an effective vocabulary learning, students can be helped by providing them with more information about the vocabulary and knowing how to learn them. "Students must know a lot of things about vocabulary such as words and phrases they need to learn, and the level of knowledge depth of each vocabulary. Students can use the following two materials to learn vocabulary: First, they can use and practice vocabulary in a natural context which is frequent and suitable to students' needs. Learning vocabulary might be better through teaching different techniques and strategies that they can even use it to learn outside the classroom. There are a lot of studies that clarify how learners learn best and how teachers might best teach"(McCarten, 2007, PP. 19-20).

The researcher sees that Learning vocabulary alone is not enough to have a successful educational process. Unless learners keep it in their long term memory, they will not be able to practice language successfully. Thus, teachers must focus on the methods that can increase retention of vocabulary.

Teaching vocabulary is a difficult task for teachers because the students' ability is limited. So, the teacher needs to use a suitable strategy in his/her classroom. Actually, there are a lot of researches which investigated the effectiveness of new strategies on learning vocabulary. Some of these strategies are guessing the meaning of the unfamiliar words through reading and connecting the prior knowledge of the student with the words around the new word in the context, using pictures as a visual technique which evokes more than one sense in students, and using a dictionary to look up the definition of the unfamiliar words directly. But there is a strategy that combines these techniques together. It is called PAVE strategy. PAVE strategy is used in teaching vocabulary where it contains pictures, dictionary, and contextual clues that can help teacher draw students' interest and arouse their motivation in the teaching-learning process. Therefore,

the current study aims at investigating the effectiveness of using PAVE strategy on learning English vocabulary and its retention among eleventh graders.

1.2 Statement of the problem:

The researcher states the problem in the following main question:

What is the effectiveness of using PAVE strategy on learning English vocabulary and its retention among eleventh graders?

1.3 Study Questions:

The following five sub-questions are derived from the main question:

1. What is the nature of PAVE strategy?
2. Are there statistically significant differences at ($\alpha \leq 0.05$) in the mean scores of the experimental group and those of the control group on the posttest?
3. Are there statistically significant differences at ($\alpha \leq 0.05$) in the total mean score between the pre-test and post-test of the experimental group?
4. Are there statistically significant differences at ($\alpha \leq 0.05$) in the mean scores of the experimental group and those of the control group on the delayed test?
5. Are there statistically significant differences at ($\alpha \leq 0.05$) in the total mean score between the post-test and the delayed test of the experimental group?

1.4 Study Hypotheses:

1. There are no statistically significant differences at ($\alpha \leq 0.05$) in the mean scores of the experimental group and those of the control group on the post test.
2. There are no statistically significant differences at ($\alpha \leq 0.05$) in the total mean score between the pre-test and post-test of the experimental group.
3. There are no statistically significant differences at ($\alpha \leq 0.05$) in the mean scores of the experimental group and those of the control group on the delayed test.
4. There are no statistically significant differences at ($\alpha \leq 0.05$) in the total mean score between the post-test and the delayed test of the experimental group.

1.5 Need for the study:

The need for this study arises from the following reasons:-

1. Most students have poor vocabulary
2. Most students don't have a short vocabulary retention.

1.6 Purpose of the study:

The general purpose of this study is to:

- check eleventh graders' achievement of English vocabulary through using PAVE strategy in teaching- learning process.
- check the eleventh graders' long term retention of vocabulary through the delayed test.
- determine if there are differences between the experimental and control groups according to the used educational method.

1.7 Significance of the study:

This study can help

1. learners in learning any unknown words they face even outside classroom via using the current PAVE strategy
2. teachers in their preparation plan of lessons where this strategy guides a learner centered class rather than a teacher centered class
3. curriculum designers in which they can facilitate the way of using this strategy by putting contextual clues inside the sentences containing the unknown words and identifying the new words for learners
4. learners by evaluating and reflecting on what they achieved as they will make sure of their definitions by using dictionaries
5. learners in activating their thinking skills through the prediction process and drawing images which represent the new vocabulary.
6. Learners in improving the other language skills such as reading since learners will read the sentences to predict the meaning through contextual clues, grammar and writing since learners have to write meaningful sentences.

1.8 Limitations of the study:

This study will be restricted to:

1. The unknown words in the 5th unit from reading book (English for Palestine 11) and the 3rd unit from reading plus book.
2. Literary stream female students
3. The first semester of the school year (2016-2017)
4. Secondary Governmental schools
5. The north of Gaza

1.9 Definition of terms:

Based on the literature view, the researcher states the following definitions:

1.9.1 Effectiveness:

The researcher defines it as the ability of developing learners' achievements in learning and retaining English vocabulary at unit 5 of pupil's book and unit 3 of reading plus book through using PAVE strategy. It is measured by eta square.

1.9.2 PAVE Strategy:

a Prediction-Association-Verification-Evaluation (PAVE) Procedure. "it is a procedure where students have to figure out a word meaning through the contextual clues, look up a dictionary to know the lexical definition, re-evaluate themselves by comparing their predictions with the lexical definitions and then represent a personal visual clue to keep remembering the definition of new vocabulary "(PAVE, 2013).

And the researcher refers to a way for teaching the unknown vocabulary existing in the context and keeping them in the long term memory in which students can predict the meaning through using the contextual clues, then write a good sentence, verify from the predicted meaning by looking up the dictionary, evaluate their prediction, write another good sentence and finally draw an image representing the meaning.

1.9.3 English vocabulary:

A group of unfamiliar words included in unit (5) in reading book "English for Palestine 11" and unit (3) in reading plus book, which are taught through using PAVE strategy.

1.9.4 Retention:

"To be able to retain things in memory or to have the ability to recall experience and knowledge after a period of learning process"(Merriam Webster dictionary, 2017).

And the researcher defines it as having the ability to recall and remember the meaning of the unknown words being taught through PAVE strategy after two weeks.

1.9.5 Eleventh graders:

Students aged between (16 – 17) years old who have been studying English for 11 years through classroom environments. Now, they study English for Palestine11 at the governmental schools for girls.

Chapter II

Literature Review

Chapter II

Literature Review

This chapter consists of two sections; the first section is about literature review of the three variables of the study and the second section is about the previous studies.

Section I: literature review:

According to the aim of this study, the effectiveness of using PAVE strategy in learning English vocabulary and its retention among eleventh graders, the researcher divided this section into three domains. These domains are vocabulary learning, vocabulary retention and PAVE strategy.

2.1 Vocabulary:

2.1.1 Definition of vocabulary:

This chapter reviews a lot of varied definitions of vocabulary. Vocabulary is defined as the words of a language, including single lexical items/words which have a specific meaning and phrases or chunks of several words which have a particular meaning, that are working the same way as individual words do (Alfaki, 2015). Similar to Alfaki' definition, "vocabulary is a set of lexemes, including single words, compound words and idioms" (Longman, 2010, p. 629)

Another definition which connects vocabulary with the setting is used in "the specialized words used in academic settings: content specific (e.g. magma) and high use academic terms (e.g. analyze, comparatively, variable) (Feldman, 2008, P 3).

Moreover, vocabulary is knowledge of words and word meanings. It has two forms: oral and print. Oral vocabulary includes those words that we recognize and use in listening and speaking. Print vocabulary includes those words that we recognize and use in reading and writing. Word knowledge also comes in two forms, receptive and productive. Receptive vocabulary includes words that we recognize when we hear or see them and may include many words to which we assign some meaning, even if we don't know their full definitions and

connotations – or ever use them ourselves as we speak and write. Productive vocabulary includes words that we use when we speak or write. (Kamil & Hiebert; as cited in Lehr, Osborn & Hiebert, 2004, P.5)

Finally, vocabulary is the collection of words that an individual knows which facilitate the process of remembering the words in communication with other people. (Mashayuni & Agusni, 2014)

2.1.2 Importance of Vocabulary:

The importance of vocabulary can be stated as the following " vocabulary is a core component of language proficiency which provides much of the basis for how well a learner speaks, listens, reads and writes(Richards & Renandya, 2002, P. 255). In addition, "Vocabulary is a vital part of communication when someone wants to talk about something. Students have to know many kinds of vocabulary and then form it to become a sentence or sentences. Or use vocabulary to say the words. Based on the explanations it can be assumed that vocabulary is very important for students because vocabulary is a central part of the language the student cannot communicate effectively or express his ideas or both orally and in written form without having enough vocabulary. Besides, vocabulary is one of the language components which can make the students understand English easier " (Arista; 2010as cited in Susilo, 2016, P.176).

Vocabulary is all the words used by the people in language context. It is one of the important aspects in learning English, because it is a basic factor to master the other four English skills such as listening, speaking, reading, and writing. Therefore, when students want to learn English, they must know vocabulary first. If the students don't not have enough vocabulary , they will get difficulties to communicate well (Mashayuni & Agusni,2014).

Vocabulary is known as one of the basics for learning language as the educational research shows the strong relationship between vocabulary and general ability of reading comprehension. As children learn to read, they must learn to write or read, and in order to be able to as children learn to read, they must learn to decode "sound-out" print, and in order to be able to decode and

make sense of the word, they must have a vocabulary base "word knowledge" (Lorraine, 2008).

2.1.4 What does knowing a new word mean?

If learners want to learn a new word, they have to know a set of factors that increase their depth of knowledge. These factors include the right pronunciation of the word, the grammatical characteristics of the word, words that are usually associated with the new word, learning words in phrases or a context not in isolation, and knowing words that are usually associated with nouns and vice versa e.g. **royal family**. Knowing if the verb is **regular** or not and if the **noun** is countable or not can also deepen a knowledge of a word (McCarthy & O'Dell, 2001).

In addition, Knowing a word includes synonyms as learners can operate with the words with similar meanings in different contexts and avoid repetition when doing an academic writing, knowing the correct word spelling and this really helps learners to recognize the word when encountering it in reading, , knowing the part of speech of the word that supports using the correct grammatical form in the sentence (Shvidko, 2014).

Moreover, researchers differentiated between word recognition vocabulary and vocabulary meaning. They identified word recognition vocabulary as the words that a student can pronounce when seen in print, whether by sight or by use of word attack skills whereas they identified meaning vocabulary as the words which a student can know its meaning or define (Chall; 1983 as cited in Blachowicz & Fisher, 2005, P. 2).

2.1.5 What make a word difficult to spell?

Some words are just difficult. English language influenced by European invaders as a lot of words borrowed from other language. There are a lot of different ways of the same sound like "tall" and "shawl". The 'aw' sound is spelt differently in each even they are pronounced the same. Difficulty includes also words that have the same pronunciation. There are a lot of words that pronounced the same even they are spelt differently like "hair" and "hare". English language

includes words that have totally different meaning but are spelt and pronounced the same. heteronyms is also one of reasons that make a word difficult. Some words are spelt the same but pronounced differently according to its meaning in the context (Shah, 2013).

2.1.6 Effective Vocabulary Instruction:

To have effective vocabulary instruction, learners must use the right educational techniques and procedures. Vocabulary instruction can be direct or indirect:

An example of the indirect one is wide reading. The more you read, the more vocabulary you learn. Thus, students must read different context that are interesting and enjoyable, and some that is challenging. Listening can be a source of learning a word. Students with learning disabilities can listen to reading aloud to get a word learning. Indirect instruction requires also multiple exposures of words in varied contexts . When students see a word many times, they remember something about the word and collect more information about it until they get a depth of a word knowledge and make a sense of what it means. Teachers must encourage students to construct a link between the new information and their prior knowledge. When students know a word, they really know more than the word's definition. They know how it is written, how it is pronounced, how it is used as a part of speech, a its multiple meanings. They differentiate between its Definitional (similar to that included in the dictionary) and contextual definitions (understanding the word' meaning according to different contexts) (Sedita, 2005).

It is useful to provide the direct vocabulary instruction in some words. For example, when students have to find the meaning of an unknown word through a context, the teacher can give them clues that help learners understand the multiple meanings of words. Through direct instruction, teacher can involve vocabulary into the before, during, and after reading stages of instruction as shown in (Table 2.1).

In addition, the teacher can use word play to enhance the students' understanding of the unknown word and after students read, teachers can use

word play to enhance the understanding of new words and create an environment of enthusiasm for learning.

Teacher can provide a chance for learners to be involved in learning the unknown words, create a rich vocabulary environment and use a variety of effective learning strategies. For younger children, using realia, actual objects is very helpful for making abstract words more concrete. Actually, using visuals such as pictures, real objects, and photographs helps learners make a sense of the new words. Teacher also can use word wall to create a rich vocabulary environment which contains words from different content areas, word books, and develop a reading room with books that teach and reinforce new concepts. Word walls engage students visually and can be used to display content vocabulary from the curriculum or involve students in activities that will help them learn new words. It is also helpful to integrate the new vocabulary into students' writing assignments (Sibold, 2011).

Moreover, associating the new words with familiar things for students or translating the new words into the students' first language by the teacher may help students to remember words more effectively (Colorado, 2007).

And the researcher urges students to be self-learners since the successful learning teaching process requires from the students to interact and have their effective role in learning with strategies. Unless students share in learning process, there will be no effective learning. The effective instruction needs more than learning the words so the researcher asks students to link the new vocabulary with things belong to them and practice the new vocabulary in different contexts inside and outside the classroom. Finally, the researcher sees that teachers should motivates their students especially if they face difficulty in learning.

Table (2.1): Three Stages for Incorporating Relevant Vocabulary

<p>Before Reading:</p> <ul style="list-style-type: none">- Pronounce the word and use the Arabic equivalent; then have students repeat the word in English several times- Tap students' prior knowledge and identify anchor or familiar words for new

vocabulary words, e.g., “walk” as the anchor for “saunter”

- Pre-teach words before students read the material
- Introduce graphic organizers that show relationships among words. Show realia, actual objects, pictures, picture books, and video clips to introduce vocabulary
- Use the Arabic equivalent
- Teach students how to use the structure of words, e.g., compound words, prefixes, roots, and suffixes, to break down a word into the meaningful units

During Reading:

- Define words in context, using sentences from students’ reading material
- Help students find the context clues that will help them determine the meaning of an unknown word as they read
- Use graphic organizers to help students process the content u Show students how to use the dictionary to confirm their predictions about the meaning of the vocabulary they meet in their reading
 - Talk-through the words as students hear these during oral reading
 - Use a variety of strategies to help students process the meaning of difficult words

After Reading:

- Focus on a limited number of key words, particularly interrelated words, to increase the depth of their understanding and concept development
- Give students multiple exposures to words throughout the day in order to cement their understanding of the word meanings
- Reinforce new words through activities, discussions, and assignments following students' reading
- Help make the words meaningful to students by linking the words with familiar things, people, or experiences
- Have students incorporate the new words into students' writing assignments
- Help students integrate new words into their speaking and writing vocabularies
- Display word walls and other graphic organizers with the new vocabulary and definitions

Adopted from (Sibold, 2011, P. 25)

2.1.7 Strategies for Teaching Academic Vocabulary:

It is important to use effective strategies for teaching vocabulary where students will be involved in learning new words—e.g., association strategies, imagery, and graphic organizers. Semantic map is one of these important strategies. When presenting a new word, it is more useful to give learners description of the known words than a lexical definition as dictionary definitions often include other difficult words that do not make sense to the students. It is a great technique that used to organize and show the relation between one piece of information. It activates the prior knowledge and gives key words as a pre reading activity. It can be used also as a post reading activity as it adds more information for the original maps to enhance understanding. If it used as both a pre and post reading levels during, it is preferred to use colored pens as ideas are recorded.

Word connect is an effective strategy which uses a venn diagram. It consists of overlapped circles. Through this diagram, students will be able to mention

similarities and differences between two words and explain the reason for the connection. The two words compare are in the top of the diagram.

Students can use also concept cube. It is a great strategy in which students receive a six squares that will be folded into a three dimensional cube. The sixth parts includes vocabulary word, synonym, Antonym, the category it belong to, essential characteristics, and examples. Then, students cut, fold, and tape the cube. After that, they roll the cube and read what comes up on the top of the square; they must tell the relationship of that word to the original one.

Word wizard is an effective strategy that enhances the cooperative learning. Students have to learn three new words and teach them to their peers or groups. The teacher divides the students into groups; each one is responsible of learning a three new words. Then, each "word wizard" are instructed to write the definition of the word in his/her own words and draw a description of this word. After each "word wizard" has completed their tasks, they go and teach their peers what they have learned. Members can copy the new words in their notebooks. (Cox, n.d.)

And the researcher highly supports the previous strategies because they enhance cooperative learning, self-learning, visualization, and multiple exposures to the new words. By having the previous factors, students will make sense of words and have a depth knowledge of them. The researcher also sees that learners has different learning styles and no one strategy can suit all learners. Thus, she motivates teachers to vary between strategies and use the suitable one for their students.

2.1.8 How Are Words Learned?

The difficulty level of learning vocabulary depends on three main things: characteristics of the learner him/herself who learns the word, the unknown word itself, and level of word learning desired. Words vary in their difficulty level, so the learning process must be passed with effective approaches in which students can recognize the unknown word, have the desire to know the word and engage effectively in the learning process. It is also important to use definitional information as new information and contextual information as known information.(Blachowicz, Fisher&Taffe,2005)

2.1.9 Vocabulary Retention:

2.1.9.1 Definition of retention:

Retention is an essential technique in the educational process. Imagine you learned many words and the next day you woke up with a free mind because you did not keep information in your memory. Therefore, your achievement will be zero. Vocabulary retention is "the ability to recall or remember things after an interval of time. In language teaching, retention of what has been taught such as(grammar rules, vocabulary)may depend on the quality of teaching, the interest of the learners, or the meaningfulness of the materials."(Richards & Schmidt, 2010: P. 498).Retention is the continued possession, use, or control of something and the fact of keeping something in one's memory. (English Oxford Dictionary,2017). Thus, the retention of vocabulary is keeping vocabulary in students' memory as they can recall it and use it.

2.1.9.2 How are words remembered?

There are some techniques the learners should follow to increase vocabulary retention. These techniques are the following:

1. **Repetition:** as being estimated, when repeating words several times over distributed intervals, it can be a good chance of being remembered.
2. **Retrieval:** the more a word is retrieved from memory, the more possible for learner to recall it any time later
3. **Spacing:** this means teaching the material over several sessions rather than teaching it in one session. It depends on teaching part of the material, then turn back and test that, then present some more, then backtrack again, and so on. The more a word is learned, the more time of testing interval can be increased.
4. **Pacing:** there are individual differences among students in their learning styles and rates of process data, so teachers should give them a chance to do their memory work through determining time to review and revise vocabulary individually.

5. **Use:** learning vocabulary alone is not enough, so students should practice language and use words in communication and conversation to make sure that they are added to long term-memory.
6. **Cognitive depth:** the more decisions the learner makes about a word, and the more cognitively demanding these decisions, the better the word is remembered.
7. **Imaging:** tests have shown that associating words with pictures lets them become more memorable. This suggests that even abstract words can be associated with mental images to help retention (Thornbury, 2002).

Summary about vocabulary

The researcher defines vocabulary as a single item or chunks of words that are used in specific settings to express particular meanings. And she clarified that mastering vocabulary is important for the four main skills (listening, writing, speaking, and reading) to be able to use language for the purpose of communication. Thus, she emphasized that vocabulary should be learnt in ways learners retain or remember them for long such as (associating them with images, using them in conversation, offering multiple exposures for the new word, connecting them with the learners' prior knowledge or to their mother tongue). In addition, learners must know more about the unfamiliar words such as spelling, pronunciation, grammatical function, definition, and things associated with them.

2.1.10 PAVE Strategy:

2.1.10.1 Definitions of PAVE Strategy:

PAVE procedure is a four-step process that promotes students to make a comparison between their predicted meaning and the dictionary definition. Students first read the unknown word within the sentence and analyze the context clues to predict the meaning of the word. Students then associate the new word with an image. Through this process, students learn a strategy that helps them become more independent learners. (Bannon et al., 1990 as cited in Sibold, 2011)

In addition, "PAVE is a multistep strategy using prediction, association, verification and evaluation to learn the meaning of words which they are used during or after reading" (Blachowicz & Cobb, 2007, P.157). It is a procedure developed to check dictionary definition against context containing the word. It helps remembering the meaning by associating words with an image. Students should predict the meaning through contextual clues, verify their definition by looking up the dictionary, and make an evaluation by comparing the two definitions. (Katyukha, 2012)

PAVE is a strategy used to figure out the meaning of the unknown words depending on their contexts. Then by using dictionaries, proficient readers check the definition that appears in the dictionary. It asks students to create a personal visual clue to help them remember the definition. It is a good way to teach students the meaning of unknown words in a text especially those which have multiple meanings(Kucer & Silva; 2005 as cited in Mashayuni & Agusni, 2014).

Finally, PAVE method depends on the prediction of the word meanings by checking context clues as teachers have students fill in a PAVE map to be familiar with the unknown words. When students come across unknown words, the first step is to get the word meaning by prediction. This is done by analyzing the context in which the word appears. The second step is association as students express their understanding of the word meaning by associating it with a meaningful sentence using the unknown words. Then, the third step is verification as students see their definition compared with the dictionary definition of the word. The fourth step is evaluation; if the students' association is correct, students will write another good sentence using the word based on the dictionary definition. The last step is association as students draw a picture associated with the word. If the student association is incorrect, students will rewrite their sentence to use the word correctly. Thus, students will write another good sentence and draw an association picture (Amanada Bise, 2014).

2.1.10.2 Advantages of PAVE Strategy:

There are several advantages of PAVE strategy for students in the learning process, especially in learning vocabulary in which the students will be easier to understand the meaning of words and know the new words. This strategy is a good way to help students remember the meaning of a new word (Paul et.al,2009, 5 as cited in Susilo, 2014). Some English teachers have used this vocabulary strategy for helping the students to be more motivated in learning. It helps to teach students that they should always look words up in a dictionary as well, instead of just trusting the definition existing in the text. With using this strategy students will be able to easily remember the meaning of the unfamiliar words, because they will have a visual image to go with it. Using this strategy in the classroom would help the students not only to learn their vocabulary, but also to introduce dictionary and help them learn how to use a dictionary. (Nichols, 2013)

Applying this strategy gives learners a chance to know the meaning so that they can look up a dictionary with an expectation of the meaning. Therefore, it is a good appeal to the traditional learners who find vocabulary learning a difficult process. (Miami-Dade Public County Schools, 2000, P.29).

2.1.10.3 Strategies for independent words learners supported by PAVE strategy:

Strategies for independent word learners supported by this tool are mentioned below:

- 1- Recognizing the significance of knowledge
- 2- Retrieving the prior knowledge and using it in building a new one
- 3- Analyzing context to understand the meaning or content
- 4- Using word structure
- 5- Using references
- 6- Using word relationship
- 7- Using word origins
- 8- Using personalization and visualization
- 9- Deepening the knowledge of a word
- 10- Using a word play (Blachowicz & Cobb, 2007,pp.157).

2.1.10.4 Procedure of PAVE strategy:

PAVE strategy follows some procedures based on the prediction, association, verification and evaluation (Miami-Dade Public County Schools, 2000,pp.31-32).

1. Introduce the P.A.V.E. procedure with a fairly easy word and then have students practice with more difficult words.
2. Write the context or sentence that includes the unknown words. For example, Mary has just arrived from Paris. She wants to speak about her journey. She really looks very "pleased"
3. Write the unknown word again in an isolated place or box and try to guess a meaning using the context clues such. For example, a student might guess that pleases means happy.
4. Write a meaningful sentence using the predicted meaning of the word. For example, a student might write: I feel very pleased when I get full marks at the exams.
5. Look up the dictionary to check if the word definition is correct or not. Then, write the definition. For example, the dictionary defines it "to make (someone) happy or satisfied"
6. Check the sentence that students write in the third step and see if they can write a better one if it is not suitable for the dictionary definition.
7. Represent the word by an association and draw an image. In this case, students will remember the word in a better way. For example, a student might draw a smile.
8. Repeat steps one through three using a more difficult word and then have students complete steps four through six together as a whole-class activity.
9. Have each student complete one word individually and share with the class.
10. Complete a few more words individually or in small groups until the procedure is internalized.
11. Encourage students to use the procedure.

2.1.10.5 More details about context clues, dictionary, and images;

1- Context Clues:

a- Definitions of context clues:

Context clues are a source of information about the unknown word. It helps learners understand the meaning of the word. This word or phrase offers clue, either purposefully or not. They can be located in the same sentence as the word/phrase or they can appear elsewhere in the paragraph (Roell, 2017). They are the syntactic and semantic hints or the words,

phrases, or sentences that surround it" that help a reader to identify an unknown or unfamiliar word (Lawrence, n.d.).

Context clue is also defined as information like (definition, antonym and synonym) that surrounds a word or phrase and offers direct or indirect hint of a meaning " (Nordquist, 2016). Roughly the same, they are "hints which help the readers to find the meaning of the unknown words. Mostly, they are found within a sentence, paragraph, or passage (Russell, 2009).

And the researcher defines it as the hints around the unknown word that facilitate the process of predicting its meaning, give learners the meaning directly or indirectly depending on how clear they are. These hints include definition, synonym, antonym, pictures, and examples.

b- Types of context clues:

Clues of different types that are often signaled by particular words and punctuation marks as mentioned in (Laroche, 2014: P.9). See the chart (Context Clues Signal Words Chart) (Appendix 7)

c- Advantages of context clues:

Context clue has many advantages in learning process where it helps readers to confirm the right pronunciation of a word students try to learn. It also helps them to remove any misunderstanding or ambiguity when passing with multiple meaning words by determining the suitable pronunciation of them. Then, readers can determine the target meaning of an unknown word, and increase their reading rate (Miami-Dade Public County Schools, 2000).

Using context clue in learning process effectively has positive effects on learners' achievement where it helps them to develop vocabulary and use their prior knowledge to figure out the meaning of the new vocabulary they don't know, increase their reading fluency by finding the way they should pronounce a word depending on its meaning,

improve their reading comprehension in which learners see the whole picture of the new topic or content, and provide them with an environment full of entertainment and enjoyment where they use context clues to get the meaning of the new vocabulary (Rynette & Kjesbo, 2010).

2- Dictionary:

a- Definition of dictionary:

“Dictionary is alphabetically arranged work that provide information, usually in concise form, about words or topics” (Schnoor, 2003). “It is derived from medieval Latin word "dictionarium". It originated from the term "dictio" meaning " a word" or "a phrase". Thus, a dictionary deals with words”. (Anas, 2013)

b- Importance of using dictionary:

There are many advantages got from using dictionary in learning English in general and vocabulary in particular. One advantage of using a dictionary is pronunciation. Through looking up a dictionary, you can check out if the word's utterance is right or wrong. Thus, it is helpful to find the right pronunciation of words. The second advantage of using a dictionary is part of speech. Using dictionary will help you to define the word part of speech if the word is verb, adjective, noun, or an adverb. One more thing, it could guide learners to choose a correct word use e.g. when saying "Huda is beautiful" the part of speech of beautiful is an adjective. Spelling is a third advantage of using dictionary since it helps learners and readers in writing words, phrases, sentences and paragraphs. Lastly, example sentences are also provided. When you want to use word and do not know how this can be, you can look up the dictionary e.g. we should put the word "hat" after the adjective in "It is a beautiful hat" (Bob, 2014).

A dictionary generally includes specific information that deepen the knowledge of each word used by the second language learners. This information includes a word history, spelling and pronunciation of a word, synonym and antonym of a word, multiple definitions to express the word one

or more meanings, part of speech to determine if the word is noun, verb, adjective or preposition, meaningful sentences including the target word, and the way the current definition has been developed. Providing readers with the etymology (the history of a word) enables him/her to know where a word comes from. All in all, a dictionary can contain biographical and geographical knowledge of a word (Sarigul, 1999).

To sum up, a dictionary is of great help for everyone, especially second language learners and those who are interested in language learning since it is useful in enriching their vocabulary.

3- Images:

a- Definition of image:

An image is "a picture that is produced by a camera, artist, mirror, etc". (Merriam Webster dictionary, 2016). similarly, it is a form of a person or object represented by a painting or photograph (Free dictionary, 2017).

b- Why is using images so effective?

Images are strong bridges that connect us to our memories. Our memories are the most valuable things which nobody can take away from us. Therefore, images are helpful in learning as they organize and process information. They help learners to make sense of what they hear. Visual learners have many images floating around in their minds so creating images innate learners' ability to their advantages. Since visualization is easy to learners, it is helpful for them to draw images beside notes and ideas to remember the details related to the notes (Sellors, 2017).

Summary about PAVE strategy:

Referring to the definitions above, the researcher inferred that all authors are in agreement on the definition of PAVE strategy. They have the same steps that should be implemented and the same goal which is comparing the students' prediction of the meaning and the lexical definition in addition to remembering the meaning of the word. On the other hand, (Amanada Bise, 2014) connects the association with writing a good sentence in addition to the association picture while other authors

mentions only the association picture in their definitions. Thus, the researcher defines PAVE strategy as an acronym of the following words (P-Prediction, A – Association, V-Verification, E-Evaluation). It is used for teaching the unfamiliar words in which the students predict what the word means through the contextual clues in the text, associate the word with a good sentence to keep remembering it, verify what the word means, by looking it up in a dictionary, and evaluate the prediction that was made by making a comparison between the students prediction and the dictionary definition. If their prediction is faulty, then students have to rewrite a good sentence and associate the word with an image to keep the meaning of the unfamiliar words in students' long term memory. The researcher also clarifies some details about the techniques used in PAVE strategy such as context clues, dictionary and images. Thus, the reader will have a complete knowledge about the strategy, the way it is applied, and its importance.

Section II

2.2 Previous studies:

This section consists of three domains: the first one concerns learning vocabulary, and the second one concerns vocabulary retention and the third one concerns PAVE strategy.

2.2.1 Studies related to vocabulary:

Alfaki (2015):

This study attempted to investigate the nature of the new vocabulary items of Spine 5 (Sudan Practical Integrated National English, Book 5) in teaching English language. It also attempted to examine the characteristic features of the lexical items included in book five: their total number, frequencies, recycling, usefulness for learners, suitability to learners' level, grading and presentation. This study used the descriptive method and content analysis technique. The analysis included the vocabulary list of Spine 5 teacher's book, the first 3000 high frequency word lists from British National Corpus and Spine 5 pupil's book. Ten words from the most recycled words will be selected in order to test spaced recycling of vocabulary. Then the data were classified, organized, analyzed, discussed and interpreted. Based on the analysis of the new vocabulary items in Spine 5, many words in word list were not in line with the first three BNC word frequency lists, the great majority of the new words in Spine 5 were not given enough recycling and Spine 5 was not based on the principles of strict control of spaced recycling.

Imliyana, Suhartono, and Husin (2015):

This study investigated whether using English pop songs is effective in teaching vocabulary to the eighth graders of SMPN 16 Pontianak. The study methodology was an experimental research, where the form used is one group pre-test – post-test design. The researcher selected class I with 35 students as the subjects of this study out of ten classes with 346 students. Class I was selected because it was the lowest class in learning English based on the researcher observation. In this research, the writer employed a measurement technique to measure the students'

vocabulary. The calculated t- value (11.8) was higher than the t- tabled value (2.04). Based on the criteria of effectiveness, it was categorized as an effective research result. Thus, the study result showed the effect of using the English Pop Songs as a media in teaching vocabulary as students' vocabulary could significantly increase.

Şener (2015):

This study was conducted to determine which vocabulary learning strategy was preferred and the vocabulary size that pre-service English teachers at a state university in Turkey had. It also examined the relationship between their strategy use and vocabulary size. To achieve the objectives of this study, 304 pre-service teachers were the sample of the research. Quantitative research design was employed through survey methodology. The researcher used an adapted version of the Vocabulary Learning Strategy Inventory and Vocabulary Levels Test to gather the data. The study findings showed that determination was the most used of vocabulary learning strategies whereas cognitive was the lowest used of vocabulary learning strategies. Besides, the relationship between the vocabulary size and cognitive strategies was seen as the most significant one. Finally, multiple comparison tests revealed a significant statistical difference between the first and fourth graders' vocabulary size.

Baharian (2014):

This study investigated the influence of using proverbs on learning vocabulary through time. It also investigated whether visual organizers and pictures can facilitate the learning of lexical items and their retention. As an experimental study, 90 pre-intermediate EFL learners were selected and divided into two experimental and one control group. The first experimental group was taught via proverbs whereas the second experimental group was taught via proverbs accompanied by pictures in five different sessions. A pre-test, treatment material, posttest and delayed posttest were employed as the study instruments. The finding of this study showed that both experimental groups who were taught via proverbs alone and proverbs accompanied by pictures had a higher achievement than the control group in the production task. Additionally, the 2nd experimental group had the highest gain of the words and retention in the delayed tasks. The study revealed that

proverbs especially the ones accompanied by pictures had the highest learning of the lexical items and retention compared to the traditional method.

Subaşı (2014):

This study investigated the vocabulary learning beliefs and strategies according to the Turkish EFL learners. The researcher assigned 45 first-year university students at the ELT Department of Anatole University. This current study used the “explanatory sequential mixed methods design” where the researcher used three instruments (vocabulary size test, vocabulary part of TOEFL test, and questionnaire about vocabulary learning) to gather the quantitative data, whereas a retrospective interview was used to collect qualitative data. The study findings showed that on the contrary to common beliefs about Turkish learners, they used more meaning oriented strategies such as guessing strategies by considering contextual clues, and dictionary using instead of depending on memorization. It was also found that Turkish learners had a lot of beliefs and strategies about proficiency test and vocabulary size. According to the cognitive level, contextual guessing, skillful use of dictionaries, note-taking, paying attention to word formation, oral repetition were found to be positively correlated with the two test types.

Azizmohammadi (2013):

This research investigated the effectiveness of using pictures and short stories on foreign language vocabulary acquisition. Sixty children and adults were randomly chosen from some elementary and high schools of Arak. Children of age range 8-12 were distributed into two groups as: 15 males and 15 females and the adults of age range 20-30 were also distributed into 15 males and 15 females. The researcher used the following instruments in this thesis which are: a questionnaire

and a pre post vocabulary test, 20 relevant pictures and a short story. According the statistical analysis, the results indicated that both pictures and short stories are effective and useful in teaching vocabulary, using pictures in teaching vocabulary is more effective than that of short stories. Therefore, the best achievement was obtained through the use of pictures in teaching English vocabulary items. Thus, the use of pictures inside classroom can create an active and dynamic environment and attract the students’ attention in learning vocabulary.

Burhayani (2013):

The objective of this research was finding the effectiveness of using songs in improving students' vocabulary among the second year students of elementary school. The writer used the experimental method. 50 subjects were taken from Ikatan Keluarga Kesejahteraan Tentara (students IKKT) Elementary School West Jakarta. The researcher divided them equally into two experimental and control groups. The researcher conducted a treatment for six times and ended it with post-test to get data. T-test formula was used to process the data. After processing the data, it was found that the calculated value (2.13) was higher than the t-tabled value (1.68). Based on this, the use of songs in improving students' vocabulary was very effective. The researcher attributed this result to the fact that using songs in teaching created an enjoyable environment and facilitated the process of remembering new words where the students who sang the song and did the actions had a good chance to remember the lyrics or new word without looking it up in the dictionary.

Echarte (2013):

This study aimed to compare the effectiveness of three different vocabulary teaching methods (word lists with Target Language definitions; word lists with L1 translations; and flashcards) in EFL classrooms. It is a cross-sectional study as data was collected on a short term basis (three weeks). On the other hand, this study is a quantitative one; there is a hypothesis and the study has been developed with a controlled measurement and confirmatory and verification-oriented data. The method used for the instruction and time are the main independent variables whereas the English Proficiency is the dependent variable. A thirty three (33) subjects (16 female & 17 male) were chosen in this research study. They were students from the 1st year of Compulsory Secondary Education (CSE)1. they live in the Basque Country and had Basque or Spanish as their first language. All the participants had Basque as the language of instruction (D model) whereas English and Spanish are only taught as school subjects (3 hours a week). A pre-test, immediate post-tests, a delayed post-test and a questionnaire are the main four instruments. The result of written data analysis shows that (1) students performed better with flashcards and translation than with definitions; (2) they obtained slightly better results with flashcards than with

translation; and (3) the results in the immediate post-test were better than in the delayed post-test with the three methods, but students still performed better with flashcards and translations than with definitions, and slightly better with flashcards than with translation.

Sahrawi (2013):

The purposes of this study were to find out the effectiveness and the significance of mind mapping for teaching English vocabulary. This study was an experimental research. This study was conducted in SMP Negeri 3 Sungai Kakap in the academic year 2012/2013 as the population was eighth grade students with a total number of 112 students and the sample was class D of the eighth grade students of SMP Negeri 3 Sungai Kakap in the academic year of 2012-2013. In collecting the data, the researcher used two instruments which were pre-test and post-test. The pre-test was given before the researcher applying the treatment while the post-test was given after the treatments. The treatment was given three times to the eighth grade students of SMP Negeri 3 Sungai Kakap in class D. The data showed the difference result between pre-test and post-test. The average achievement of the students' pre-test was 46.28 and 86.14 in the post-test. Furthermore, the data showed that there was significant difference of the score where the t-test result 31.88. It showed that the result of t-test was higher than t-table (2.052) at 5% with degree of freedom N-1 (28-1). Therefore, it can be suggested that mind mapping can be an effective technique to teach English vocabulary. This result hopefully would motivate English language teachers to use a mind mapping in teaching English in the classroom.

Al Hashemi & Musallam (2012):

This study investigated the vocabulary learning strategies of undergraduate Malaysian learners of Arabic as a foreign language (AFL) in terms of frequency of use and beliefs. The study methodology is descriptive research. The instrument of this study was a questionnaire where it included two main themes— strategies (45 items) and beliefs (20 items). It was conducted on a total of 152 first year learners of Arabic in the University of Islamic Sciences. the researcher used a questionnaire as the tool of the study. The findings indicated that Malaysian AFL learners recognized the importance of using different vocabulary learning strategies, used these

vocabulary strategies at approximately the same level of frequency. However, it was indicated that dictionary related strategies were used more frequently in contrast to other strategies, namely, note taking, memorization, and guessing, which was the least usually used strategy.

Zahedi & Abdi (2012):

This study examined if imagery strategy would help lower-intermediate student's English vocabulary learning compared with direct translation. The study adopted the experimental approach. 40 EGP learners were selected as subjects of this study. They were equally distributed into experimental and control groups. The experimental group received imagery instruction as a treatment for a term whereas the control group received direct translation. A pre- posttest were conducted on the sample administered in order to collect more data. Results revealed that the experimental group had a higher achievement than that of control group in terms of English vocabulary mastery.

2.2.2 Studies related to English vocabulary retention:

Al-Lahham (2016):

The researcher investigated the effectiveness of using Keyword strategy in developing vocabulary and its retention at eighth grade learners. The research methodology was experimental. (78) eighth graders were purposively chosen from Al Shaheed Mohammed Addorra Basic School for Boys. They were distributed into two equivalent experimental and control group. The experimental group included 38 students and the control group included 40 students. The Keyword strategy was used to teach the experimental group whereas the conventional method was used to teach the control one in the academic year 2015-2016. The instruments used to collect the data were an achievement test (pre-post and delayed). T- test independent sample and T-test paired sample were used to analyze the data of this study. As for measuring the effect size of the Keyword strategy among the experimental group, the researcher used effect size technique. The study findings indicated that the experimental group outperformed the control one due to using Keyword strategy. It also revealed that the keyword strategy is an effective in developing students' English vocabulary and its

retention. Thus, the researcher recommended using the keyword strategy in teaching English and conducting more related researches about using this strategy.

Demir (2013):

The aim of this study was providing insight into the understanding of teaching and learning vocabulary. It also aimed at determining if in-class vocabulary strategies developed by the researcher were helpful for Turkish 8th grade EFL (English as a Foreign Language) compared with traditional vocabulary instruction. It adopted the experimental approach. 129 of 8th graders were chosen from public elementary group in Konya. The experimental group included 66 students from 2 classes and the control group included 63 from 2 classes. In order to measure the vocabulary retention, 30 target words were selected from clipping, post test and retention test were given to both experimental group and control group after the experiment. The results of this study indicated that students who were exposed to in class vocabulary learning strategies obtained more vocabulary.

Keshta & Al-Faleet (2013):

This study aimed at developing tenth graders vocabulary achievement through using puzzles. It also aimed at increasing vocabulary retention through the long-term effect of the puzzles. It adopted the experimental approach. 80 tenth graders were purposively chosen from Abdul Kareem Al-Aklook secondary School for boys in Dair Al Balah divided into two equals experimental and control groups. The experimental group was taught vocabulary via using the education puzzles and the control group was taught vocabulary via using the conventional method in the academic year 2012/2013. The researchers used post and delayed test to gather data. The findings of this study showed that the experimental group had got higher scores than the control one. It also showed that students in the experimental group had the same scores on both post and delayed test due to the use of the educational puzzles. Thus, the researcher recommended the importance of conducting further researches about using puzzles in teaching English language and using the techniques which increase retention of vocabulary.

Tavakoli & Gerami (2013):

This research investigated the impact of using mnemonic non-verbal approaches (the keyword method [KWM, here after] and Pictorial method) on learning vocabulary and its retention . The study methodology was experimental research. To achieve the aim of this study, 60 adult female elementary students were selected as the sample of this study in Isfahan. They were randomly distributed into three equal group (2 experimental groups and one control group). The researcher used a battery of quizzes after the end of the experiment to measure the subjects' short memory recall of the lexical items, and a vocabulary delayed posttest after 2 weeks of the treatment to see vocabulary achievements among the three groups. The results showed that keyword strategy had a positive effect on subjects' vocabulary learning. Based on the post and delayed tests analysis, the keyword method could retain vocabulary items in the long term memory better than the pictorial method.

Yoshii & Flaitz (2012):

This study examined incidental vocabulary learning (retention)in reading program through using annotations. The approach of this study was experimental , 151 ESL students were chosen from universities in Florida. They were aged between 16-47 and obtained from 36 countries and 18 languages. The represented sample included 69 female students and 82 male students. A vocabulary retention assessment: Picture recognition, Word recognition, and Definition Supply tests were used as instruments to gather data. Based on ANOVA analyses, the results revealed that the Combination group (annotations with text and picture) had a higher achievement than the text only and the picture only groups on the intermediate test. According to the delayed test, the Combination group also outperformed the other two groups but the differences were not large as ones of the immediate test. A repeated measure of ANOVAs revealed that there were no significant differences among groups where the scores on the delayed test were reduced from those of the immediate tests.

Hashemzadeh (2012):

This paper attempted to determine whether the recognition exercise (fill-in-the-blank, and matching) and production exercises (paraphrasing, and glossing)

affect vocabulary retention differently. 65 female Elementary EFL learners in Ghalam-eBartar Institute were selected to represent the sample of this study. They all have the same proficiency level as they were exposed to placement test before attending the Institute classes. The number of the sample was decreased because of students' absence during the experiment. The researcher used the following instruments to gather the data (pre-test, recognition exercises, production exercises, mini dictionary, and posttest). After applying the experiment and analyzing the data, the results revealed that students retained more words in (fill-in-the-blank, and matching) exercise than the other exercise types in both intermediate and delayed test. it also indicated that recognition exercises in EFL vocabulary retention. Additionally, the students' scores of the intermediate test was higher than those of the delayed test in the four exercise types. Therefore, the researcher said that words should be repeated and presented in different exercise in order to be stored in students' long term memory and retained easily.

Khabiri & Pakzad (2012):

This study attempted to find whether teaching critical reading strategies affect intermediate EFL learners' vocabulary retention or not. The study was experimental where 72 male and female students with a range age of 17-32 were taken from a total number of 114 students at Fazan and Farzanegan language schools in Tehran. They were chosen based on a piloted PET (2009) and a piloted teacher- made- vocabulary recognition test and divided into two experimental and control groups with 13 students of each. The experimental group was taught the critical reading strategies whereas the control group was taught the common comprehension based approach. Finally, a retention posttest was applied on the subjects of both groups after two weeks of the treatment end. Based on t-test independent sample, teaching critical reading strategies had a positive effects on intermediate EFL learners' vocabulary retention.

Commentary on Studies related to English vocabulary and its retention:

It is obvious that all the previous studies mentioned above have one purpose which is developing vocabulary learning and its retention and this indicates the importance of mastering vocabulary as it is considered an effective factor in learning

English. The current study agreed with the previous ones in solving this problem and developing it.

The previous studies varied in the strategies used to develop learning vocabulary such as songs, keyword, proverbs, short story, mind-mapping, and imagery strategy.

The current study agreed with some studies in using picture as a technique in developing vocabulary learning and its retention such as Aziz mohammadi (2013) and Zahedi & Abdi (2012). Previous studies shows also their positive effectiveness in developing learning vocabulary.

The majority of the previous studies mentioned above adopted the experimental method . In addition, they were conducted in varied countries (Palestine, Turkey, Iran and Indonesia).

Some studies determined the time between the post test and delayed test with ten days or two weeks and this agrees with the current study as the researcher conducted the delayed test after an interval of two weeks from the post test.

Unlike the current study, Nemati's (2013) and Flaitz's (2012) used ANOVA as there were three groups while the current study conducted the experiment on two groups; the experimental group and the control one.

As for the results, most studies agreed with the results of the current study as there were differences between the experimental group and the control group in favor of the experimental group.

2.2.3 Studies related to PAVE strategy:

Altwaijri (2017):

This study aimed at investigating the effectiveness of the "PAVE" vocabulary learning strategy on developing a group of students' vocabulary and self-efficacy while studying English as a foreign language at the College of Languages and Translation, at Al-Imam Muhammad Ibn Saud Islamic University. The research sample consisted of sixteen Saudi female English language learners. A pre/post vocabulary test and a self-efficacy scale were administered to the study participants

before and after the treatment. The participants were introduced to one of the vocabulary learning Strategies “PAVE strategy”, which has been used. The results provided support for the hypotheses of the study and showed that the students performed significantly better on the post administration of the vocabulary test as well as on the self-efficacy scale. Thus, it can be said that the PAVE vocabulary learning strategy had a large impact on developing students’ vocabulary and self-efficacy. The study recommended that the use of vocabulary learning strategies should be given enough attention to develop students’ vocabulary and self-efficacy.

Susilo (2015):

The objective of this study was to find out whether there is a significant difference in students’ achievement taught by using PAVE strategy and who were not. The writer used one of the quasi experimental designs, that is pretest posttest nonequivalent control group design to conduct this research. The population was all the third grade students of SD Negeri 182 Palembang in academic year 2012/2013 with total number 100 students. The sample of the study was 60 students taken by using convenience method. The writer used a test to collect the data. The writer used independent sample t-test to analyze the data. The result of the study showed that there was a significant difference on students’ vocabulary achievement taught by PAVE strategy and those who were not. The value of t-obtained was 3.714. At a significant level 0.05 for the two tailed testing with degree of freedom (df) 58 the table was 2.021, t-test showed that t-obtained higher than t-table as a critical value, the null hypothesis (Ho) in posttest was rejected and the research hypothesis (Ha) in pretest group was accepted. It means that there was a significant difference posttest on students’ vocabulary achievement taught by PAVE strategy of SD Negeri 182 Palembang. This research might be useful for teachers because it can help students, remember new words and it is more stimulating in teaching and learning process.

Mashayuni & Agusni (2014):

The writer discussed learning vocabulary by combining PAVE and Super Word Web strategies. Both of those strategies can make the students easy to find definition of unfamiliar word and know synonym of the unfamiliar words. Then the students will be active during earning vocabulary and easier to remember the word

for a long time. In this paper, the writer chose to combine Pave and Super Word Web strategy proposed by Blackhowicz & Cobb (2007, 157), Greenwood (2004, 99), Kucer & Silva (2005, 53) and Bromley (2002, 64), Roe et al (2011, 122). As new procedures after combining are: first, Instruct students to write a sentence or the context in which the word appears. Second, Choose the target word. Third, Have student rewrite the word and predict the meaning. Fourth, Write a sentence using the words predicted meaning. Fifth, Use the dictionary to verify the words meaning. Sixth, Revise the sentences using words verified definition. Seventh, Provide three or four synonym for the word (from the dictionary, glossary, or context) and write them in the box. Eighth, List or draw three or four images you associate with the synonyms and write them around the box, connect these words to the box with lines. Ninth, Have student to copy these webs into their vocabulary notebooks or display them in the classroom. In this paper the writer focused on combining PAVE and Super Word Web Strategies in teaching vocabulary. Because by combining PAVE and Super Word Web Strategies the students were able to add their new vocabulary, know the meaning and remember of the words easier for a long time. This paper can give contribution to the teacher to solve the student's difficulties in learning vocabulary and the students can get successful to increase their vocabulary. Then for students, they will understand about material and students are not focused on one word only.

Syafitriza & Siska (2014):

The writers combined the procedures "Knowledge Rating Scale" strategy by Brunner (2011,p13) and "PAVE (Prediction, Association, Verification and Evaluation)" strategy also by Blackhowel and Cubb (2007,p157), because by combining both procedures will increase student's ability to convey and analyze the information. The results showed that combining Knowledge Rating Scale and PAVE strategy is a good way to improve students' ability in vocabulary especially in reading. Teaching vocabulary in reading by using Knowledge Rating Scale and PAVE strategy for young learners is a strategy that makes students more understand and develops students' knowledge to get new vocabulary.

Howell (2012):

This study investigated to find the effect of implementing seven vocabulary strategies ((P.A.V.E) procedure; Vocabulary Anchors, semantic webs, concept cards; Pictionary; Jeopardy, and Word sorts) during a course lasted for 7 week. Twelve of fourth graders (4 boys and 8 girls) were selected from school in the southwestern part of Stokes County to work with the researcher, North Carolina. The research adopted the experimental approach. At the end of each week, the students took a goal assessment to measure how much they have learned over those seven weeks. There are four math goals that are tested at the end of each school year. Twenty five percent of his students are below grade level, and are at a really significant place in their school year, in accordance with the state standards. The students really seem to have great vocabulary word recall until after their Christmas break. During their Christmas break the students do not study their vocabulary words nor are they presented with new vocabulary words.

Comment on the previous study related to Pave strategy:

There are some similarities and differences between the current study and the previous studies according to the purpose, methodology, tools, and results.

It is obvious that nearly all of the previous studies related to using PAVE strategy have a positive effectiveness on learning process specially vocabulary skill.

Concerning the purpose, the current study investigates the effect of using PAVE strategy on learning English vocabulary and its retention. On one hand, **Susilo (2015)** agrees with the current study as it used the same independent variable (PAVE strategy) and the same dependent variable (learning vocabulary). On the other hand, it does not measure the retention of the vocabulary. As for the previous studies; **Mashayuni (2014)** and **Syafitriza and Siska (2014)**, both of them did not use PAVE strategy a lone as an independent study but rather combined it with another strategy. In addition, they used only one dependent variable which is learning vocabulary without measuring the retention. Thus, **Mashayuni (2014)** and **Syafitriza and Siska (2014)** do not agree typically with the current study. As for **Altwaijri (2017)**, it has the same purpose but it used the dependent variable (self-efficacy) instead of retention.

Concerning the tools, Howell (2012) is the only study that used a pre-post delayed test. On one angle, some studies such as **Susilo (2015) and Altwaijri (2017)** agrees with the current study as they use a pre-posttest to collect the data. On the other angle, **Susilo (2015) and Altwaijri (2017)** does not measure the students' achievement of vocabulary retention. Thus, the delayed test was not used as a measurement tool. Moreover, **Altwaijri (2017)** does not agree with the current study as it used an self-efficacy scale.

Concerning the methodology, the current study adopted the experimental approach and thus it agrees with the previous studies; **Altwaijri (2017)** and **Howell (2012)**. The current study does not agree with **Susilo (2015)** since it adopted the quasi experimental approach.

In addition to that, the samples of previous studies were varied in grade, size and gender.

General commentary on the previous studies:

After reviewing the previous studies, the researcher concluded that

- 1- There is a strong relationship between using PAVE strategy and developing vocabulary achievement in English language.
- 2- There is a strong relationship between using PAVE strategy and keeping vocabulary retention in the long term memory.
- 3- All the previous studies focused on the positive effectiveness on the experimental group achievement.
- 4- The results of the previous studies emphasized the weakness of the students' achievement of vocabulary.
- 5- Pave strategy can be integrated with another strategies to teach vocabulary such as Knowledge Rating strategy and Super Word Web.
- 6- There is no study about PAVE strategy has investigated the hypothesis that say " there are no statistically significant differences in the total mean score between the pretest and the post test of the experimental group" expect the current study.
- 7- This study about using PAVE strategy in developing vocabulary and its retention is the first one conducted in Palestine according to the researcher knowledge.

The researcher benefited from the previous studies by the following:

- 1- Writing the literature view and knowing the references related to the topic of this study
- 2- Designing the study instruments
- 3- Determining the research design of this study which was consisted of two experimental and control groups.
- 4- Analyzing the collected data by the suitable statistical methods
- 5- Deigning the teacher's guide.

Chapter III

Methodology

Chapter III: Methodology

This chapter covers the procedures the researcher went through to apply the study. It introduces a complete description of the methodology of the study: the research design, the population, the sample, instruments, the pilot study, and the statistical treatment of the collected data.

3.1 Research design:

The study used the experimental approach because it is suitable for the nature of the study. It requires two groups of students: an experimental group and a control one. The experimental group was taught through PAVE strategy, while the control group was taught through the traditional method(See figure (3.1) below).

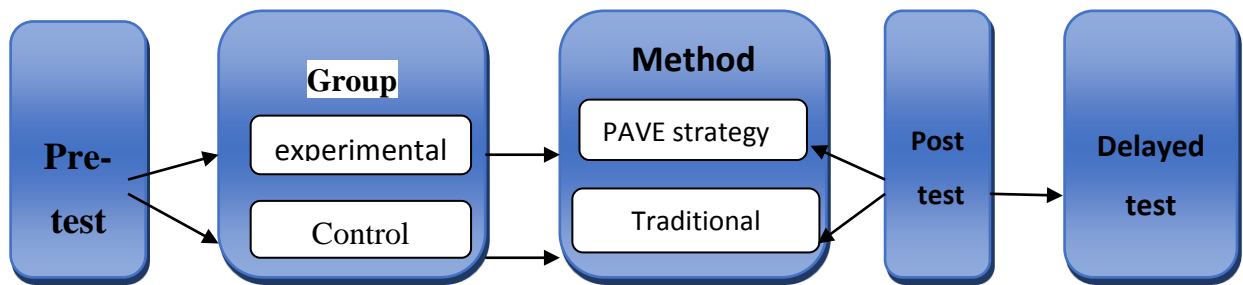


Figure (3.1): Research Design

3.2 Population of the study:

The study population included all eleventh (female) graders at the governmental schools in the North of Gaza Governorate for the scholastic year (2016 – 2017). The population of the study was counted 2855 female students.

3.3 Sample of the study:

The study sample included (72) students distributed into two groups. One experimental group that consisted of (36) students and a control group that consisted of (36) students as shown in Table (3.1).

Table (3.1): Distribution of the sample according to the group

Group	Experimental	Control	Total
No. of the sample	36	36	72

The groups were randomly chosen from a purposive sample from Tal Al Rabee Secondary Girls' School in the North of Gaza. They were equivalent in their general achievement in accordance with the statistical treatment of their results in the second term of the school year (2015-2016). The researcher made sure that both groups were equivalent through results of the independent sample T test. Table (3.2) below shows the means of both experimental and control groups in the pretest.

Table (3.2): Means of experimental and control groups on the pre test

Domain	Group	No.	Mean	Std. Deviation	T	Sig. value	sig. level
Vocabulary pre- test	Experimental Group	36	6.61	2.195	1.227	.5	sig. at .2
	Control group	36	7.33	2.767			

"t" table value at (70) df. at (0. 2) Sig. level equals 1.292

Table (3.2) shows that the t computed value (1.227) is less than the t tabled value (1.292) . This means that there are no differences between vocabulary achievement of the experimental group and the control one.

3.4 The variables of the study:

The study included the following variables:

3.4.1 Independent Variable:

The independent variable in this study is the teaching method:

- PAVE strategy.

3.4.2 Dependent Variable:

The dependent variable is represented in

- The students' achievement of English language vocabulary .
- Vocabulary retention.

3.5 Instruments:

To achieve the aims of the study, the researcher used the following tool:

- A pre post and delayed vocabulary test

3.5.1 Achievement test:

The researcher designed a pre-post and delayed achievement test to measure the effectiveness of using PAVE strategy on learning English vocabulary and its retention among eleventh graders. It was used as a pretest applied before the treatment, as a posttest applied after the treatment and finally as a delayed test applied after two weeks of the post test.

3.5.1.1 The general aims of the test:

The test aimed at measuring the effectiveness of using PAVE strategy in developing the achievement of eleventh graders' vocabulary and its retention in English language.

3.5.1.2 Sources of constructing the test:

The researcher depended on "English for Palestine 11" pupil's book and reading Plus book to construct the vocabulary test. Furthermore, the researcher consulted the English teachers and supervisors in the Directorate of Education, North Gaza Governorate and some colleague teachers.

3.5.1.3 Items of the test:

The test items are distributed into five questions as follows:

- 1- Finish the following sentences using words from the box below. This question includes 6 items which measure the students' ability to pick words depending on the context . One mark was given for each item. It measures understanding level.
- 2- Match words from column "A" with words from column "B" to form compound nouns. This question measures also the students' ability to match the word with its suitable one from the second column. This question includes four items and one mark was given for each item. It measures Application level.
- 3- Replace the underlined phrases in these sentences with their synonyms from the box below. This question measures the students' ability to analyze the phrases and replace them with a single synonym. It includes 5 items and one mark was given for each correct item. It measures understanding level.
- 4- Complete the following sentences with the suitable word family. This question measures the students' ability to find the suitable word family according to its location in the sentence. It includes four items and one mark was given for each correct item. It measures analysis level.
- 5- Choose the correct opposite of the underlined words. This question measure the students' ability to retain the opposite of the given words. It includes 5 items and one mark was given for each correct item. It measures remembering level.

Table (3.4): Distribution of the Vocabulary Achievement Test

Questions	Type	NO. of items	Marks
1	Finish the following sentences using words from the box below	6	6
2	Match words from column "A" with words from column "B" to form compound nouns	4	4
3	Replace the underlined phrases in these sentences with their synonyms from the box below	5	5

Questions	Type	NO. of items	Marks
4	Complete the following sentences with the suitable word family	4	4
5	Choose the correct opposite of the underlined words	5	5
Total		24	24

3.5.1.4 The pilot study:

The test was conducted on a random sample of size (36) twelfth grade students from Tal Al Rabee' Secondary School for Girls. The results were recorded and statistically analyzed

Based on the statistical results of validity and reliability, the items of the test were not changed.

- Time Estimation

The trial application on the pilot study helped in estimating the time required for answering the questions according to the following equation:

$$\frac{\text{time of the first student} + \text{time of the last student}}{2} = 10 + 40 \div 2 = 25$$

Therefore, the time of test was (25) minutes.

3.5.1.5 The validity of the test:

Validity of the test means to measure what it is designed to measure. (Al-Agha, 2004). The study used both the referee validity and the internal consistency validity.

3.5.1.6 The referee validity:

After setting the test in its primary version, it was examined by a group of referees, experts in teaching methods and education, and also by expert supervisors and teachers for the same level. The number of these experts was

(10), (See appendix 5).The items of the test were modified according to their recommendations. The final experimental test is presented in Appendix (2).

3.5.1.7 Internal consistency validity:

Internal validity of the test is the first statistical test used to test the validity of the test. It is measured by the correlation coefficients between each item of the test and the total test. Table (3.5) clarifies the correlation coefficient for each item of the test and the whole test. The p-values (Sig.) are less than 0.05, so the correlation coefficients are significant at $\alpha \leq 0.05$, so it can be said that all items of the test are consistent and valid to measure what it was set for. This validity was calculated by using Pearson correlation coefficient as shown in table (3.5).

Table (3.5): Correlation coefficient of each item and the whole test

No.	Correlation Coefficient	P-Value (Sig.)	No.	Correlation Coefficient	P-Value (Sig.)
1	.488	0.001	13	.372	0.013
2	.559	0.000	14	.533	0.000
3	.582	0.000	15	.605	0.000
4	.571	0.000	16	.302	0.037
5	.563	0.000	17	.322	0.028
6	.413	0.006	18	.540	0.000
7	.519	0.001	19	.608	0.000
8	.618	0.000	20	.626	0.000
9	.282	0.048	21	.510	0.001
10	.658	0.000	22	.590	0.000
11	.336	0.022	23	.552	0.000
12	.481	0.001	24	.412	0.006

3.5.1.8 Test reliability:

The test is regarded reliable when it has the same results after applying it again for the same purpose in the same settings (Al-Agha, 1996). In order to measure the test reliability, the researcher used Cronbach's Coefficient Alpha and Split Half method.

(A) Cronbach's Coefficient Alpha:

The normal range of Cronbach's coefficient alpha value is between 0.0 and + 1.0, and the higher values reflect a higher degree of internal consistency. The value of Cronbach's Alpha equals 0.702. This value is considered high which indicates good reliability of the test.

(B) Split Half Method:

The correlation coefficient between the odd and even questions equals 0.504. The Spearman-Brown Coefficient equals 0.670. The value of this correlation coefficient indicates good reliability of the test.

3.5.1.9 Discrimination coefficient for each item of the test:

Discrimination coefficient refers to the test ability to differentiate between the high achievers and the low achievers. Table (3.6) shows the discrimination coefficient for each item of the test.

Discrimination coefficient

$$= \frac{\text{No. of correct items of high achievers} - \text{No. of correct items of low achievers}}{\text{No. of high achievers} + \text{No. of low achievers}}$$

Table (3.6): Discrimination Coefficient

No.	Discrimination Coefficient	No.	Discrimination Coefficient
1	0.20	13	0.30
2	0.40	14	0.40
3	0.30	15	0.20
4	0.50	16	0.20

No.	Discrimination Coefficient	No.	Discrimination Coefficient
5	0.50	18	0.50
6	0.60	19	0.80
7	0.40	20	0.70
8	0.30	21	0.40
9	0.60	22	0.30
10	0.30	23	0.60
11	0.50	24	0.70
All Items		0.44	

Table (3.6) shows that the discrimination coefficient ranged between (0.20 – 0.80) with a total average of (0.44), which means that each item was acceptable or in the normal limit of discrimination according to the viewpoints of assessment and evaluation specialists.

3.5.1.10 Difficulty Coefficient:

The difficulty coefficient of every item was calculated after applying the test on the pilot study which counted (36) using the following formula:

$$\text{Difficulty Coefficient} = \frac{\text{No. of students who gave wrong answers}}{\text{the total student who answered the test}} \times 100$$

Table (3.7) below shows the difficulty coefficient for each item of the test.

Table (3.7): Difficulty Coefficient

No.	Difficulty Coefficient	No.	Difficulty Coefficient
1	0.80	13	0.65
2	0.70	14	0.45
3	0.35	15	0.80
4	0.80	16	0.80

5	0.80	17	0.40
No.	Difficulty Coefficient	No.	Difficulty Coefficient
6	0.75	18	0.45
7	0.70	19	0.45
8	0.80	20	0.75
9	0.75	21	0.80
10	0.70	22	0.65
11	0.75	23	0.65
12	0.65	24	0.55
All Items		0.67	

Table (3.7) shows that the difficulty coefficient ranged between (0.35 and 0.80) with a total average of (0.67), which means that each item was acceptable or in the normal limit of difficulty according to the viewpoint of assessment and evaluation specialists.

3.5.2. Teacher's Guide English for Palestine (11)

The researcher prepared a teacher's guide which includes lesson plans for the chosen lessons available in pupil's book -English for Palestine 11 and reading plus book(See appendix 4).

3.5.2.1 The General Aim of the Teacher's Guide :

The researcher designed a teacher's guide based on using PAVE strategy to help her apply out the experiment on the sample of the study and to help teachers who would like to develop their students' achievements through using PAVE strategy.

3.5.2.2 The Sources of Designing the Teacher's Guide :

The researcher was able to design the teacher's guide through reviewing the governmental school teachers' attitudes, the previous studies, the teacher's guide of English for Palestine 11, pupils' book, and reading plus book.

3.5.2.3 Description of the Teacher's Guide:

The researcher provided an explanation of PAVE strategy, activities, worksheets, and lesson plans used for teaching the new vocabulary included in unit 5 of pupil's book and unit 3 of reading plus book. Each lesson included: (the objectives, new vocabulary, resources and materials, procedures and activities, allowed time, evaluation and homework). Below is a description of the components of the lesson plan:

1. The Objectives:

The objectives of each lesson were derived from the English for Palestine 11 textbook lessons. The researcher took into consideration the eleventh graders' achievement in vocabulary intended to be developed in this study.

2. New vocabulary :

The new vocabulary was chosen from the key language mentioned in the teacher's guide of English for Palestine 11.

3. Estimated time:

Unit	Title	Period 1	Period 2	Period 3	Period 4 & 5	Period 6	Total
3	Mixed feelings	90	45	45	45	-	225
5	Let's go for a walk	90	45	-	-	45	180

4. Resources and Materials :

Pupil's book, reading plus book, pictures, dictionary, PAVE map, worksheets, board and notebooks were used differently for each lesson.

5. Activities and Procedures :

A. Stage One (Warming-up)

In this stage, the teacher introduces funny educational games or questions about the students' personal experience, which prepares the students for the class and makes them into English mode.

B. Stage Two (revision)

In this stage, the teacher checks the homework with students and writes the answers on board. She/ He links between the topic of new lesson and their prior knowledge, reviews the previous lesson words with students and asks them about their preparation for the new lesson.

C. Stage Three (presentation)

In this stage, the teacher presents the new vocabulary through the first four steps of PAVE strategy (determining the unknown words, guessing the meaning through the context clues, looking up the dictionary and writing a meaningful sentence).

D. Stage Four (rounding up)

In this stage, the teacher summarizes the lesson through various activities such as revising the new language, practicing it through acted performance, oral exercises or educational games and representing the new language with visual associations.

E. Stage Five (evaluation)

In this stage, the teacher asks students to answer worksheets and exercises alone as a summative evaluation.

F. Stage Six (homework):

In this stage, the teacher asks students to answer exercises and worksheets at home

3.5.2.4 The Validity of the Teacher's Guide:

The teacher's guide was examined by a group of referees who are experts in teaching methods and education and teachers for the same level. It was modified according to their recommendations (**See appendix 4**)

The study progressed according to the following steps:

1. Checking out literature and previous studies related to the effects of PAVE strategy on learning and vocabulary development and retention.
2. Designing an achievement test based on English for Palestine 11
3. Presenting the test to a number of specialists, including professors of teaching methodology, supervisors of English language and experienced teachers to benefit from their experience.
4. Conducting the test on a pilot study to measure its suitability (validity and reliability) to the study.
5. The pre vocabulary - test was applied on the control and the experimental groups in the first term of the scholastic year (2016- 2017). The results were recorded and statistically analyzed.
6. The researcher checked the equivalence of both groups through the pre – test and then conducted the experiment.
7. The post vocabulary test was conducted on the experimental and the control groups. The results were recorded and statistically analyzed.
8. The delayed (retention) vocabulary test was administrated to the experimental and control groups after two weeks of conducting the post test. The results were recorded and statistically analyzed.
9. Presenting the summary, the suggestions and the recommendations in the light of the study conclusions.

3.6 Statistical Analysis Procedures:

The researcher used quantitative data analysis methods. The data analysis was made utilizing (SPSS 24). The researcher utilized the following statistical tools:

- 1) Pearson correlation coefficient for validity.
- 2) Cronbach's Alpha and Split Half Method for Reliability Statistics.
- 3) Discrimination Coefficient.
- 4) Difficulty Coefficient.
- 5) Frequency and Descriptive analysis.
- 6) Independent Sample T-test to control the extraneous variables and to measure the statistical differences in the means between the two groups due to the study variables.

7) Paired Sample T-test to measure the differences in the total mean scores between the post-test and the delayed test of the experimental group and between the pretest and posttest.

8) Effect size (Eta and Eta Squared).

Summary

This chapter presented the procedures of designing and applying the instruments, the subjects and the statistical analysis that the researcher adopted in analyzing the results of the pre, post and delayed vocabulary test. The next chapter presents the study results.

Chapter IV

Study Results

Chapter IV

Study Results

This study aimed at investigating the effectiveness of using PAVE strategy on learning English vocabulary and its retention among 11th graders. This chapter highlights the findings of the study regarding the research questions. The researcher used different statistical procedures in order to treat the collected data. The results are presented in the form of statistical tables

4.1 Data Analysis:

The data of the study will be presented and analyzed in relation to each study question in the sections that follows:

- **Examination of Research Questions**

4.1.1 Answer to the first Research Question:

The study first question was stated as follows: **What is the PAVE strategy?**

To answer this question, refer to chapter2 (P, 19-22). In order to deepen the knowledge of PAVE strategy, the researcher used the following tools:

1. Teacher Guide

The teacher's guide included the procedures and activities teachers can use to apply PAVE strategy in teaching vocabulary. It also included the objectives and detailed lesson plans that show the steps teacher should follow to teach vocabulary effectively through PAVE strategy.

2. Teaching Aids

Several teaching aids were used during applying PAVE strategy such as PAVE map, work sheets, paper dictionaries, and colored pens to draw pictures in order to arouse the students' interest, attention and interaction with the teachers.

3. Evaluation tools

The researcher used one tool to evaluate PAVE strategy: the pre, post and delayed achievement test . **(See also chapter3)**

4.1.2 Answer to the second Research Question:

The study second question was stated as follows:

Are there statistically significant differences at ($\alpha \leq 0.05$) in the mean total score between pre-test and the post-test of the experimental group?

Out of this question, the researcher derived the following null hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) in the total mean score between the pre-test and the post-test of the experimental group. To examine this hypothesis, the researcher used paired samples T-test to measure the significant differences between the experimental group in the pretest and the same group (n = 36) who learned vocabulary via PAVE strategy in the vocabulary posttest as shown in Table (4.1) below.

Table (4.1):T. Test Paired Sample Results of Differences between the Pre Test and the Post Test of the Experimental Group

Domain	Group	No.	Mean	Std. Deviation	T	Sig. value	sig. level
Vocabulary achievement test	Experimental Pre test	36	6.6111	2.19451	-8.502	0.000	sig. at 0.02
	Experimental post test	36	15.0000	6.41427			

"t" table value at (35) df. at (0.02) Sig. level equals 2.423

As shown in **table (4.1)** that the T. computed value (**8.502**) is larger than the T. tabulated (**2.423**) which means that there are statistical significant differences in the total mean score between the vocabulary pretest and the vocabulary posttest of the experimental group. **Table (4.1)** shows also that the mean of the pretest was

(6.6111) whereas the mean of the post test was(15.0000). Therefore, the null hypothesis which assumes that there are no statistically significant differences at ($\alpha \leq 0.05$) in the total mean score between the pretest and the post test of the experimental group is rejected. The researcher attributes this result to the effectiveness of using PAVE strategy on learning vocabulary.

4.1.3 Answer to the Third Research Question:

The study third question was stated as follows:

Are there statistically significant differences at ($\alpha \leq 0.05$) in the mean scores of the experimental group and that of the control group on the post test of vocabulary?

Out of this question, the researcher derived the following null hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) in the mean scores of the experimental group and that of the control group on the vocabulary post test

To examine this hypothesis, the researcher used independent samples T-test to measure the significant differences between the experimental group ($n = 36$), who learned vocabulary via PAVE strategy and the control group ($n = 36$), who learned vocabulary via the traditional method on the post vocabulary test as shown in Table (4.2) below.

Table (4.2): T. Test Independent Sample Results of Differences between the Experimental and the Control Group in the Vocabulary Post Test

Domain	Group	No.	Mean	Std. Deviation	T	Sig. value	sig. level
Vocabulary achievement test	Experimental	36	15.0000	6.41427	3.287	0.000	sig. at 0.05
	Control	36	10.8889	3.89709		0.000	sig. at 0.05

"t" table value at (70) df. At (0.05) Sig. level equals 1.990

As shown in **table (4.2)** that the T. computed value (**3.287**) is larger than the T. tabulated (**1.990**) in the test, which means that there are statistical significant differences at ($\alpha \leq 0.05$) in the mean scores between the experimental and control group of the vocabulary posttest in favor of the experimental group, who learned via the PAVE strategy. **Table (4.2)** also shows that the mean of the post-test of the experimental group was (**15.0000**), whereas the mean of the control group was (**10.8889**). This means that the null hypothesis which says that there are no statistically significant differences at ($\alpha \leq 0.05$) in the mean scores between the experimental group and that of the control group on the vocabulary post testis rejected.

The researcher attributes this result to the fact that using PAVE strategy effectively in the teaching process with all its interesting tools and aids helps students to learn vocabulary effectively where they construct their knowledge by themselves and use more than one technique in one strategy (guessing meaning from context clues, using dictionary, and drawing pictures) . Thus, PAVE strategy developed the eleventh graders' English vocabulary achievement.

To show the extent of PAVE's effect on the experimental group achievement of vocabulary, the researcher applied the "Effect Size" technique.

Table (4.3):Level of Size Effect (η^2)

Level of Size Effect (η^2)		
	Eta	Eta Squared
Post test	.366	.134

Table (4.3) shows that the effect size of PAVE strategy on students' vocabulary achievement is medium . This means that the effect of PAVE strategy is significant. It also indicates that the scores of the experimental group who learned via PAVE strategy on the vocabulary posttest was higher than the scores of the control group who learned via the traditional method. This good effect may be due to the use of varied activities and techniques during employing PAVE strategy in learning vocabulary.

4.1.4 Answer to the Fourth Research Question

The study fourth question was stated as follows:

Are there statistically significant differences at ($\alpha \leq 0.05$) in mean scores between the post test and the delayed test of the experimental group?

Out of this question, the researcher derived the following null hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) in mean scores between the post test and the delayed test of the experimental group. To examine this hypothesis, the researcher used paired Samples T-test to measure the significant differences between the post test and the delayed test of the experimental group ($n = 36$) as shown in Table (4.4) below.

Table (4.4): T. Test Paired Sample Results of Differences between the Post Test and the delayed Test of the Experimental Group

Domain	Group	No.	Mean	Std. Deviation	T	Sig. value	sig. level
Vocabulary achievement test	Experimental post test	36	15.0000	6.41427	.191	.850	sig. at 0.05
	Experimental delayed test	36	14.8611	7.09589			

"t" table value at (35) df. At (0.05) Sig. level equals 2.021

As shown in **table (4.4)** that the T. computed value(**.191**) is less than the T. tabulated (**2.021**) which means that there are no significant differences in total the mean score between the posttest applied on the experimental group directly after the experiment and the delayed test applied on the same group after 2 weeks of the post test. **Table (4.4)** also shows that the mean of the post vocabulary test was (**15.0000**)while the mean of the delayed vocabulary test was (**14.8611**).Therefore, the null hypothesis which assumes that there are no statistically significant differences at ($\alpha \leq 0.05$) in total mean score between the post test and the delayed test of the

experimental group is accepted. The researcher attributes this result to the long term effect of PAVE strategy on the vocabulary retention of the experimental group.

4.1.5 Answer to the fifth Research Question:

The study fifth question was stated as follows:

Are there statistically significant differences at ($\alpha = < 0.05$) in the mean scores of experimental group and that of the control group on the vocabulary delayed test?

Out of this question, the researcher derived the following null hypothesis:

There are no statistically significant differences at ($\alpha = < 0.05$) in the mean scores of the experimental group and that of the control group on the vocabulary delayed test. To examine this hypothesis, the researcher used independent samples T-test to measure the significant differences in the means cores of the experimental group ($n = 36$) who learned via PAVE strategy and that of control group ($n = 36$) who learned via the traditional method on the vocabulary delayed test as shown in Table (4.5) below.

Table (4.5): T. Test Independent Sample Results of Differences between the Experimental and the Control Group in the Vocabulary delayed Test

Domain	Group	No.	Mean	Std. Deviation	T	Sig. value	sig. level
Vocabulary achievement test	Experimental delayed test	36	14.8611	7.096	2.588	.000	sig. at .012
	Control delayed test	36	11.36	3.936			

"t" table value at (70) df. At (0.05) Sig. level equals 1.990

As shown in **table (4.5)** that T. computed value (**2.588**) is larger than T. tabulated (**1.990**) in the test, which means that there are significant differences at ($\alpha = 0.05$) in the mean scores of the experimental group and that of the control group on the English vocabulary delayed test in favor of the experimental group. **Table (4.5)**

also shows that the mean of the experimental group was (14.8611) whereas the mean of the control group was (11.36). This means that the null hypothesis which says that there are no statistically significant differences at ($\alpha \leq 0.05$) in the mean scores of the experimental group and that of the control group on the English vocabulary delayed test is rejected.

To show the extent of PAVE's effect on the long term memory of the experimental group, the researcher applied the "Effect Size" technique as shown in **Table (4.6)** below.

Table (4.6): Level of Size Effect (η^2)

Level of Size Effect (η^2)		
	Eta	Eta Squared
Control group*		
Experimental group	.777	.603

Table (4.6) shows that the effect size of using PAVE strategy on students' vocabulary retention is large. This means that the effect of PAVE strategy is significant. It also indicates that the scores of the experimental group who learned via PAVE strategy on the vocabulary delayed test was higher than the scores of the control group who learned via the traditional method. This large effect may be due to the long term effect of PAVE strategy on the vocabulary retention of the experimental group.

Summary

This chapter presented the study findings obtained through the statistical procedures of SPSS. The researchers sees that the results were as expected since PAVE strategy includes a group of great and significant techniques and all previous studies emphasized its positive effect on the teaching learning process. Moreover, she noticed a positive signs during implementing the experiment as the students in the experimental group were so motivated to use PAVE strategy every class, The

next chapter presents discussion of findings, conclusions, pedagogical implications and recommendations.

Chapter V

**Discussion of Findings, Conclusions
and Recommendations**

Chapter V

Discussion of Findings, Conclusions and Recommendations

This chapter discusses the results of the study. It summarizes the conclusions which will be deduced in the light of the study results and the pedagogical implications that the researcher has suggested. It also involves suggestions and recommendations for further studies. Such suggestions are expected to be beneficial for course designers, eleventh grade's teachers of English, supervisors, students and educators.

5.1 Study Main Findings

The study main findings were as follows:

1. There were statistically significant differences at ($\alpha \leq 0.05$) in the total mean score between the pre-test and the post-test of the experimental group.
2. There were statistically significant differences at ($\alpha \leq 0.05$) in the mean scores between the experimental group and the control group in the English vocabulary Post- test in favor of the experimental group.
3. There were no statistically significant differences at ($\alpha \leq 0.05$) in the total mean score between the post-test and the delayed test of the experimental group.
4. There were statistically significant differences at ($\alpha \leq 0.05$) in the mean scores between the experimental group and the control group in the English vocabulary delayed – test in favor of the experimental group.

5.2 Discussion of Study Findings

This current study aims at investigating the effectiveness of using PAVE strategy on English vocabulary and its retention among eleventh graders. So, the experiment was designed to determine if the use of PAVE strategy would improve students' vocabulary and its retention. Based on the findings of this study, the results show that using PAVE strategy has a significant effect on the students' level of vocabulary achievement and its retention in favor of the experimental group, which was taught by using PAVE strategy compared with the results of the control group, which was taught by the traditional method. This means that PAVE strategy can be

considered effective in improving students' vocabulary achievement and retention since it leads to activating their previous knowledge and increasing their retention of it.

The findings of the present study agree with some previous studies' results that proved an effective role and impact of PAVE strategy on vocabulary learning and teaching worldwide. These are: Altwaijri (2017), Susilo (2015), Mashayuni (2014), Syafitri and Siska (2014) and Howell (2012)

Discussion of the study hypotheses findings:

5.2.1 Discussion of the first hypothesis findings:

The researcher investigated the first question which tests if there are statistically significant differences at ($\alpha \leq 0.05$) in the total mean scores between the pretest and the post-test of the experimental group.

The researcher notices that the subjects' achievement of the experimental group is highly increased on the post test. Therefore, there are significant differences in the total mean score between the pretest and the post test of the experimental group who was taught English vocabulary via PAVE strategy during the experiment.

Through the result of this question, the researcher sees that the students' achievement mostly depends on the teaching method more than the students' level of intelligence. The teaching method has a great role in achieving the objectives. Thus, if the method is a suitable and a good one, the students' achievement will be high and vice versa. The result of this question approves that PAVE strategy is a suitable one that suits the students' needs and abilities so students had a higher achievement on the posttest compared with their achievement before. The researcher attributes this result to the fact that PAVE strategy is a great pedagogical tool as it offers a good chance for learners to interact, use their prior knowledge, have their role in the educational process and search for the meaning of the unknown vocabulary instead of receiving it by the teacher or other students.

According to the researcher knowledge, there are no previous studies related to the effectiveness of using PAVE strategy have examined the hypothesis that there are differences in the total mean score between the pre-test and the post-test of the experimental group. Actually, this gives the current study a greater value and differentiates it from its predecessors since it examines a new hypothesis that wasn't done before. As for the strategies used in teaching vocabulary and its retention, the result of this question is in agreement with the previous studies: **Keshta and Al-Faleet (2013)** and **Sahrawi (2013)** which approved that there are statistically significant differences between the pretest and the post test of the experimental group.

5.2.2 Discussion of the second hypothesis findings :

The researcher investigated the second question which tests if there are statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of the experimental group and that of control group on the vocabulary posttest.

According to the results of the statistical analysis, the researcher notices that the achievement of the experimental group is higher than that of the control group. This means that there are statistically significant differences between the mean scores of experimental group subjects who were taught English vocabulary via PAVE strategy and that of the control group subjects who were taught English vocabulary via the traditional method in relation to the vocabulary post-test.

The researcher notices also that the value of Eta Square (η^2) was (.134) which reveals that the effect of using PAVE strategy on learning English vocabulary among the experimental group subjects was large. Thus, the researcher attributes the high achievement of the experimental group to the following factors:

- PAVE is a new strategy that differs from the traditional one. In their natures, learners tend to be more attractive to the new and different things. Thus, the brain becomes more attractive and stimulated to receive the new knowledge.
- PAVE strategy includes varied techniques such as (context clues, dictionary, and images) which enhance the variety of activities. This variety is a positive one since it offers the chance for the students, who have a difficulty

in specific part, to find themselves in another one. In addition, this variety decreases students' feeling of boredom.

- Using visual presentations and self-researching a track students' attention, evoke more than one sense at them, and increase their motivation of learning
- By using PAVE strategy, students have the chance to use their prior knowledge to build a new one, practice the new vocabulary and acknowledge it into a context not in isolation.
- On one hand, PAVE strategy supports the combining between concrete and abstract things. On other hand, it allows for students to express themselves since they use their emotions to create a link between the vocabulary and its meaning.

The result of this question is in agreement with the following previous studies:

Altwaijri (2017), Susilo (2015) and Howell (2012). As for the strategies used in teaching vocabulary and its retention, the result of this question is in agreement with the previous studies: **Al-Lahham (2016)**, **Baharian (2014)**, **Keshta and Al-Faleet (2013)**, **Burhayani (2013)**, **Zahedi and dAbdi (2012)**, **Khabiri and Pakzad (2012)** and **Imliyana, Suhartono, and Husin (2015)** as the experimental groups got a higher achievement than those of the control groups in the post test.

The researcher finds that through this study, students was able to learn a new vocabulary, analyze context to figure out meaning by finding hints, use dictionary to search for the new vocabulary meaning, develop their writing skill through forming meaningful sentences, know the part of speech of the new vocabulary, use their visualization to draw an image representing the meaning of the new vocabulary and retain the new vocabulary in their long term memory. Thus, this means that the experimental group had a higher achievement than the control one.

5.2.3 Discussion of the third hypothesis findings:

The researcher investigated the third question which tests if there are statistically significant differences at ($\alpha \leq 0.05$) in the total mean score between the post-test and the delayed test of the experimental group.

The result of this question shows that the students' achievement on both post and delayed test was roughly the same. This means that there were no statistically significant differences at ($\alpha \leq 0.05$) in the total mean score between the post-test and the delayed test of the experimental group.

The researcher considers this a positive result since some factors such as the passage of time and acquiring new experiences would be a great chance to lose information but in this study the subjects of the experimental group kept the new vocabulary in their long term memory and had the same achievement of the post test. This means that PAVE strategy did not affect only students' short term memory but it also included their long term memory.

The researcher attributes this result to some factors;

- First, the brain is an image processor more than a word processor. Thus, using image as a part of PAVE strategy supports learning for a long time.
- Second, PAVE strategy supports the use of dictionary which offers the chance to build a total knowledge of the word rather than knowing only the meaning of the word.
- Third, PAVE strategy provides students with the chance to use vocabulary in contexts. Therefore, students were able to keep vocabulary in their long term memory since they practice the language.

There are no studies about PAVE strategy discusses this hypothesis. As for the strategies used in teaching vocabulary and its retention, the result of this question is in agreement with the previous studies: **Al lahham (2016)** and **Keshta and Al-Faleet (2013)** as they approved that the achievements of both posttest and delayed test are the same. On the contrary, this result does not agree with the previous studies: **Hashemzadeh (2012)** and **Echarte (2013)** as the students' scores of the intermediate test were higher than those of the delayed test.

5.2.4 Discussion of the fourth hypothesis findings:

The researcher investigated the **fourth** question which tests if there were statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of the experimental group and that of the control group on the vocabulary delayed test.

Regarding the fourth question, the researcher notices that the difference between the experimental group and the control one is still as large as the posttest since the value of Eta Square (η^2) reached to .603 according to table (4.4). This result proved the large effectiveness of using PAVE strategy on students' long term memory. The researcher attributes this result to the nature of PAVE strategy which combines between learning vocabulary and practicing them and shows vocabulary in several contexts. In addition, it includes varied techniques, several teaching aids, and visual presentations which enhance transferring vocabulary from the short term memory to the long term memory.

The result of this question is in agreement with the previous study: **Howell (2012)**. As for the strategies used in teaching vocabulary and its retention, the result of this question is in agreement with the previous studies: **Al lahham (2016)**, **Baharian (2014)**, **Khabiri and Pakzad (2012)**, **Tavakoli and Gerami (2013)**, **Demir (2013)** and **Keshtaand Al-Faleet (2013)** since they approved also that the experimental groups had a higher retention than those of control group in the delayed test.

5.3 Conclusion:

Based on the findings of the current study, the following important conclusions were reached:

1. PAVE strategy is more effective than the traditional method in teaching English vocabulary.
2. PAVE strategy increased also the retention of vocabulary as the students face more real objects through the strategy as images and dictionaries which enhance the memory process.

3. PAVE strategy provided students with a better learning environment full of relaxation and comfort as it affected their achievement and retention of English vocabulary.
4. PAVE strategy provided the students with opportunities of evaluating and reflecting on what they achieved as they will make sure of their definitions by using dictionaries.
5. PAVE strategy activated students' thinking skills through the prediction of words meanings and drawing images representing the words
6. PAVE strategy focused on student centered class rather than teacher centered class as they construct the knowledge by themselves.
7. PAVE strategy developed more skills such as writing and grammar since students have to write sentences including the unfamiliar words before looking up dictionaries and after it.
8. On one hand PAVE strategy increases the competition between students themselves as they compete who will be the first in finding the meaning from the dictionary. On other hand, it increases the competition between the student and himself as he wants to achieve agreement between his prediction and the lexical definition of a word.

5.5 Study Recommendations:

Based on the results of the study, the researcher suggests some recommendations that are directed to the following:

1. PAVE strategy is recommended as an effective strategy in teaching and learning vocabulary and increasing its retention.
2. The Palestinian curriculum should be provided with various flexible texts where students can use PAVE strategy easily.
3. The Ministry of Education should support schools with all effective equipment which facilitates the process of learning vocabulary through PAVE strategy such as computers, LCDs and the internet . In this case, students can use electronic dictionaries instead of the paper ones and this saves both effort and time.
4. Supervisors should provide teachers with instructional materials to increase their awareness of the importance of using PAVE strategy in teaching and

learning vocabulary.

5. Supervisors should give courses for the teachers about how the PAVE strategy can be implemented inside the classroom to learn vocabulary.
6. English language teachers should pay attention to the strategies through which students can communicate, interact with each other, have motivation and construct their knowledge by themselves.
7. Supervisors and English language teachers should pay more attention to the strategies related to learning vocabulary and its retention especially the mnemonics strategies as mastering vocabulary has an important role in learning English language.

5.6 Recommendations for Further Studies:

The researcher suggests the following recommendations for further studies:

- 1- Investigating the effectiveness of combining PAVE strategy with Super Word Web strategy on learning vocabulary.
- 2- Investigating the effect of PAVE strategy on the students' attitudes towards English as a foreign language.
- 3- Investigating the effect of using PAVE strategy and Word Rating Knowledge on learning vocabulary.
- 4- Investigating the impact of using PAVE strategy on developing reading comprehension skills.
- 5- Investigating the impact of using PAVE strategy on increasing learners' motivation.

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Appendices



Appendix (1): Refereeing Vocabulary Test

"English for Palestine 11"

Dear doctors and specialists in teaching method of English Language

The researcher is carrying out an M. ed research entitled " **The effectiveness of Using PAVE Strategy on Learning ESL Vocabulary and its Retention among Eleventh Graders**". One of the requirements of this study is to conduct pre-post delayed vocabulary test. The researcher would kindly request from you to look carefully at the attached test whether the items of the test are suitable or unsuitable.

Your notes and responses will be highly appreciated and confidential.

No.	Items	High	Average	Low
1	The test items represent the material			
2	The test items suit eleventh's graders.			
3	The layout is acceptable.			
4	The time assigned (25 minutes) is suitable			

You are so kindly invited to add your comments, modify or change if necessary, or even omit the inconvenient or irrelevant items according to your judgment and respected perspective.

.....

Thank you for collaboration

Researcher,

Asma'a Mahmoud Bader

Appendix (2): Vocabulary Achievement test

Name/ _____ Marks : ____/35

Notes:

1- The test is 3 papers.2- The test includes 6 questions (all of which are obligatory)

1- Finish the following sentences using words from the box below:(6 marks)

irreversible / struggle / profit / incredible / ownership / journey / touch

- 1- Romantic stories ----- me so much.
- 2- My dad took an ----- decision about my studying abroad.
- 3- Recently, the -----of lands has become a wealth.
- 4- Palestinians have led long ----- with the Israeli occupation.
- 5- The crowd on the first day of Ramadan was -----.
- 6- Our ----- to Egypt was very beautiful.

2- Match words in first column with the second one to form compound noun (4 marks)

First column		Second column		Answers	
1	draw	a	land	1-d	Drawback
2	grass	b	bow		
3	bird	c	side		
4	country	d	back		
5	rain	e	song		

2- Replace the underlined phrases in these sentences with their synonyms from the box below: (5 marks)

Entertainment / paradise / employment / profit /strangers

- a- I have a temporary job for three months but I hope to get permanent work that you are paid to do after that -----.
- b-I hope there will be some performance that people enjoy at the children`s party -----.
- c-You can make good money for selling something for a higher price than what it cost to buy it by buying traditional crafts and selling them to tourists.-----.
- d-When I went to the university, I met a lot of new people-----.
- e- Muslims pray to go to the perfect place in the afterlife-----.
-

4- Complete the following sentences with the suitable word family: (4 marks)

- Ex: a- I always find the news **depressing**. (**depress**)
- b- The hotel has planned many activities to ----- its guests (**amusing**)
- c- The student receives an amazing ----- for his activities. (**praise**)
- d- This book contains many ----- stories.(**touch**)
- e- last year, I came through a big ----- (**achieve**)
-

5- Choose the correct opposite of the underlined words:(5 marks)

- a- Nabil Hamed has written his book to **preserve** the Palestinian national treasures
- a. keep b. destroy c. save
- b- She **awoke** to find the streets covered in snow

a. slept b. got up c. recognized

c- This job is **temporary** until I graduate from university

a. passing b. permanent c. short-term

d- I had **pleasant** memories with my friends .

a. nice b. hateful c. sad

e- My father had great **Loss** in the previous deal.

a. profit b. failure c. expenses

The Islamic University of Gaza
Denary of Postgraduate Studies
Faculty of Education
Curricula and Instruction Department



Appendix (3): Refereeing Teacher's Guide

"English for Palestine 11"

Dear teachers,

The researcher is carrying out an M. ed research entitled " **The Effectiveness of Using PAVE Strategy on learning ESL Vocabulary and its retention among eleventh Graders**". One of the requirements of this study is designing a teacher's guide which clarify the way PAVE strategy that used to teach new vocabulary mentioned in unit 5 of pupil's book and unit 3 of reading plus book.

It contains objectives for each lesson, procedures and activities, evaluation and estimated time

The researcher would kindly request from you to look carefully at the attached teacher's guide, add your comments, modify or change if necessary, or even omit the unsuitable items according to your judgment and respected perspective.

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Thank you for collaboration

Researcher

Asma'a Mahmoud Bader

Appendix: (4) Teacher's Guide

Grade: 11	Unit 3	Title: Mixed feelings	Period: 1	Grade: 11
New vocabulary	in search of- bigotry- demonstrate			
Resources and materials	Reading plus book- pictures- worksheets- dictionary- notebook- PAVE map			Time:45
Objectives	Stage	Activities and procedures		Time
SS. expected to:	Warming up	1. Surprise! In this play, the teacher brings some objects to the class such as a hat, sunglasses and a suitcase to introduce the new unit about travelling. First, they have to guess why their teacher brought all these things to class, and then, they have to ask him or her questions to guess the place she or he is going to visit.		5 minutes
1- mention the vocabulary introduced in the previous class.	Revision	- SS activate their prior knowledge and mention vocabulary related to the topic.		3 minutes
3- figure out the meaning of the unknown word through using PAVE strategy	Presentation	- SS. mention why people travel and differentiate between travel and tourism. - T. starts reading the quotations and explain it till he comes across an unknown word. - SS. read again the sentence in which the unknown word is involved. - T. asks SS. to write the unknown word in a free square in PAVE map.		25 minutes

		<ul style="list-style-type: none"> - T. activates students' prior knowledge then ask them to analyze the words around the unknown word to find the clues which help in figuring out the meaning of the unknown word. - SS. predict the meaning of the unknown word depending on contextual clues. - T. asks SS. to work individually or in groups and verify their prediction by looking at dictionary. - T. asks SS. to give meaningful sentence using the new vocabulary - T. continuo reading the following quotations till he/she comes across another unknown word. 	
3- link the new vocabulary with an visual association	Rounding up	<ul style="list-style-type: none"> - SS. draw images which represent the new vocabulary meaning in the free square in the PAVE map. - T. revises again the new vocabulary with students. 	5 minutes
4-use the new vocabulary through worksheet	Evaluation	<ul style="list-style-type: none"> - SS. do the worksheet in groups. 	7 minutes
	Homework	<ul style="list-style-type: none"> - SS. write the differences between travel and tourism using the new vocabulary. 	

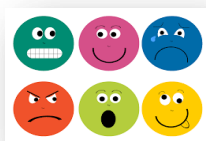
WORKSHEET

1- Complete the following sentences with words from the box below:

Demonstrate- in search of- feeling- bigotry

- 1- Man sometimes travel around the world ----- his dreams
- 2- Travelling gives a man ----- of happiness .
- 3- Results ----- that human needs to travel away from routine.
- 4- ----- is a famous phenomenon in America.

2- Match the word with its association:



Feeling

Bigotry

Demonstrate

In search of

3- Correct the mistakes in the following sentences:

- 1- Demonstrating is to differentiate between people because of their religion, color, or skin. (-----)
- 2- Policemen searching the truth by collecting more than one evidence. (-----)

Grade: 11	Unit 3	Title: Mixed Feelings	Period: 1	Grade: 11
New vocabulary	cease- awaken- pleasantest			

- 3- I have feeled a lot of happy thing since I came here. (-----)

Resources and materials	Reading plus book- pictures – dictionary- PAVE map- notebook		Time:45
Objectives	Stage	Activities and procedures	Time
SS. expected to:	Warming up	- SS. play whispering game	3 minutes
1- differentiate between the travel and tourism	Revision	T. revises the homework with SS.	5 minutes
2- figure out the meaning of the unknown word	Presentation	<ul style="list-style-type: none"> - T. continuo reading the quotations and explain them it till he comes across an unknown word. - SS. read again the sentence in which the unknown word is involved. - T. asks SS. to write the unknown word in a free square in PAVE map. - T. asks SS. to write the unknown word in a free square - T. activates students' prior knowledge then ask them to analyze the words around the unknown word to find the clues which help in figuring out the meaning of the unknown word. - SS. predict the meaning of the unknown word depending on contextual clues. - SS. works individually or in groups and verify their prediction by looking at dictionary. -T. asks SS. to give meaningful sentence using the new vocabulary - T. continuo reading the following quotations till he/she comes across 	25 minutes

		another unknown word.	
3- link the new vocabulary with an visual association	Rounding up	- SS. draw images which represent the new vocabulary meaning in a free square in the PAVE map.	4 minutes
4-use the new vocabulary through different activities	Production	- SS. do Ex. 3 & Ex. 4 on P. 29	8 minutes
	Homework	- SS. do the worksheet below at home	

WORKSHEET

1- Give the meaning of the following words from the text on P. 28:

- a- Sensation -----.
- b- Get up -----.
- c- Happy -----.
- d- Stop -----.

2- fill the space with the suitable part of speech:

- a- You must be -----(awaken) at 6:00 am.
- b- The students were cleaning the class all the day without ----- (cease)
- c- Travelling abroad give me a feeling of -----(pleasant)
- d- I dislike -----(feel) at home when I'm abroad.

3- give the form of comparative for the following adjectives:

- a- Ramy looks ----- (pleasant) than Heba.
- b- drinking water is -----(strange) than eating sugar for me.

Grade: 11	Unit 3	Title: Mixed feelings	Period: 2	Grade: 11
New vocabulary	Journey- demand-stranger- exhausted			
Resources and materials	Reading plus book- pictures—dictionary- PAVE Map			
Objectives	Stage	Activities and procedures	Time:45	
SS. expected to:	Warming up	<ul style="list-style-type: none"> - SS. play the game of Fact or Fiction In this game, one person tells a short story about themselves or someone they know or heard about. Usually it is something funny or crazy. It can be a true story, or something made up. 	3 minutes	
1- answer the worksheet	Revision	<ul style="list-style-type: none"> - T. revises the worksheet with SS. - T. asks SS. to say a story happened with them during travel 	5 minutes	
2- figure out the meaning of the new vocabulary introduced in period 1.	Presentati on	<ul style="list-style-type: none"> - T. reads the passage till he comes across the unknown word. - SS. read again the sentence in which the unknown word is involved. - T. asks SS. to write the unknown word in a free square - T. activates students' prior knowledge then ask them to analyze the words around the unknown word to find the clues which help in figuring out the meaning of the unknown word. - SS. predict the meaning of the unknown word depending on contextual clues. - T. asks SS. to verify their prediction by looking at dictionary. - SS. work individually or in groups and verify their prediction 	25 minutes	

		<p>by looking up the dictionary.</p> <ul style="list-style-type: none"> - T. asks SS. to give meaningful sentence using the new vocabulary. - T. continuo reading the passage till he/she comes across another unknown word. 	
3- express their understanding of the new vocabulary meanings	Rounding up	<ul style="list-style-type: none"> - SS. draw images which represent the new vocabulary meaning in a free square in the PAVE map. - T. asks one student to perform the new vocabulary and the other students have to guess what it is. 	5 minutes
4- use the new vocabulary in exercises .	Evaluation	- SS. do in pairs (Ex.3 and Ex.4) on their reading plus book. P. 30.	7 minutes
	Homework	-SS. do at home (Ex.5 and Ex.6) on their reading plus book. Ps. 31.	

WORKSHEET

1- put the following words in a complete sentences:

a- exhaustion

b- wildlife

c – excitement

d- birdsong

2- do as shown between brackets:

a- grassland is animals and plants that grow independently of people, usually in natural conditions ----- (correct)

b- birdsong= ----- (meaning)

c- I feel very ----- /exhaust/ (part of speech)

d- ----- is the steep side of an area of high land. (complete)

3- match the words in column 1 with words in column 2 to form compound nouns:

a- wild song

b- draw land

c- bird life

d- grass back

Grade: 11	Unit 3	Title: Mixed feelings	Period: 3	Grade: 11
New vocabulary	Paradise - grassland- cliffs			
Resources and materials	Reading plus book- pictures—dictionary- worksheet- board- PAVE map			
Objectives	Stage	Activities and procedures	Time:45	
SS. are expected to:	Warming up	- SS. play the game :Can't Say Yes or No	5 minutes	
1- answers the homework	Revision	- T. revises the hw with SS. and writes the answers on the board.	3 minutes	
2- figure out the meaning of the new vocabulary introduced in period 3.	Presentation	<ul style="list-style-type: none"> - T. reads the passage till he comes across the unknown word. - SS. read again the sentence in which the unknown word is involved. - T. asks SS. to write the unknown word in a free square - T. activates students' prior knowledge then ask them to analyze the words around the unknown word to find the clues which help in figuring out the meaning of the unknown word. - SS. predict the meaning of the unknown word depending on contextual clues. - T. asks SS. to verify their prediction by looking at dictionary. - SS. work individually or in groups and verify their prediction by looking up the dictionary. - T. asks SS. to give meaningful sentence using the new vocabulary. - T. continuo reading the passage till he/she comes across another unknown word. 	24 minutes	

3- link the new vocabulary with a visual association	Rounding up	- SS. draw images which represent the new vocabulary meaning in a free square in the PAVE map.	5 minutes
4- use the new vocabulary in varied exercises	Evaluation	- SS. do the worksheet (2) in pairs.	8 minutes
	Homework	- SS. do at home (Ex.3 and Ex.4) on their reading plus book. P. 32.	

Grade: 11	Unit 3	Title: Mixed feelings	Period: 4 & 5	Grade: 11
New vocabulary	Entertainment- employment- profit- temporary			
Resources and materials	Reading plus book- pictures—dictionary			
Objectives	Stage	Activities and procedures	Time:45	
SS. expected to:	Warming up	<ul style="list-style-type: none"> - SS. play the game of Fact or Fiction In this game, one person tells a short story about themselves or someone they know or heard about. Usually it is something funny or crazy. It can be a true story, or something made up. 	5 minutes	
1- answer the hw (Ex.3 & Ex. 4) introduced in P. 32	Revision	<ul style="list-style-type: none"> -T. revises Ex. 3 & Ex. 4 with SS. and write the answers on the board. 	5 minutes	
2- figure out the meaning of the new vocabulary introduced in period 4 & 5	Presentation	<ul style="list-style-type: none"> - T. reads the passage till he comes across the unknown word. - SS. Read again the sentence in which the unknown word is involved. - T. asks SS. to write the unknown word in a free square - T. activates students' prior knowledge then ask them to analyze the words around the unknown word to find the clues which help in figuring out the meaning of the unknown word. - SS. predict the meaning of the unknown word depending on contextual clues. - T. asks SS. to verify their prediction by looking at dictionary. - SS. work individually or in groups and verify their prediction by looking up the dictionary. - T. asks SS. to give meaningful 	25 minutes	

		sentence using the new vocabulary. - T. continuo reading the passage till he/she comes across another unknown word.	
3- link the new vocabulary with a visual association	Rounding up	- SS. draw images which represent the new vocabulary meaning in a free square in the PAVE map.	3 minutes
4- use the new vocabulary in different exercises	Evaluation	- SS. do the Ex. 4 & Ex. 5 on P. 34	7 minutes
	Homework	SS. do Ex. 1 & Ex. 2 on P.35 at home	

WORKSHEET

1- Use -ing form of the verbs in the box to complete the sentences below:

(depress- exhaust- bore- touch- interest)

- a- Failing in the exam after studying hard is very -----.
- b- Repeating the same routine is a ----- thing.
- c- Watching TV in one of the ----- things I do at weekend.
- d- This author really write a ----- stories.
- e- Cleaning all the house at the same day is very -----.

2- Do as shown between brackets:

- a- Membering of the club cost £10 per year.----- (correct)
- b- Rambling ----- (synonym)
- c- Walking is a way of escaping from a polluting environment-----
(correct)
- d- ----- (friend) is a very great thing. (part of speech)

Grade: 11	Unit 5	Title: let's go for a walk	Period: 1	Grade: 11
New vocabulary	irreversible- wander- pulled up/pulled down- occupation			
Recourses and materials	Pupils book- pictures—dictionary- PAVE map			
Objectives	Stage	Activities and procedures	Time:45	
SS. expected to:	Warming up	T. asks SS. if they go for a walk, with whom, and why	3 minutes	
1- mention previous familiar vocabulary	Revision	- T. asks SS if they know the meaning of the words highlighted in the first paragraph of the text on P.48	3 minutes	
2- figure out the meaning of the new vocabulary introduced in period 1	Presentation	<ul style="list-style-type: none"> - T. asks SS. to explain the pictures on P. 48 with familiar words - T. reads the passage till he comes across the unknown word. - SS. Read again the sentence in which the unknown word is involved. - T. asks SS. to write the unknown word in a free square - T. activates students' prior knowledge then ask them to analyze the words around the unknown word to find the clues which help in figuring out the meaning of the unknown word. - SS. predict the meaning of the unknown word depending on contextual clues. - T. asks SS. to verify their prediction by looking at dictionary. - SS. work individually or in groups and verify their prediction by looking up the dictionary. - T. asks SS. to give meaningful sentence using the new vocabulary. - T. continuo reading the passage till he/she comes across another 	27 minutes	

		unknown word.	
3- link the new vocabulary with a visual and contextual association	Rounding up	<ul style="list-style-type: none"> - SS. draw images which represent the new vocabulary meaning in a free square in the PAVE map. - SS. use the new vocabulary to communicate with each other through a short dialogue 	7 minutes
4- practice the new vocabulary	Evaluation	- SS. do Ex. 3 on P. 49	5 minutes
	Homework	Do Ex. 4 on P. 49 at home	-

Grade: 11	Unit 5	Title: let's go for a walk	Period: 1	Grade: 11
New vocabulary	Preserve- praise- take for granted			
Resources and materials	Pupils book- pictures—dictionary - PAVE map			
Objectives	Stage	Activities and procedures	Time:45	
SS. expected to:	Warming up	- SS. play whispering game.	3 minutes	
1- retrieve the vocabulary introduced in the previous class	Revision	-T. revises the hw with SS. - T. revises the vocabulary introduced in the previous class	5 minutes	
2- figure out the meaning of the new vocabulary introduced in the second paragraph of the text in period 1	Presentation	- T. reads the passage till he comes across the unknown word - SS. Read again the sentence in which the unknown word is involved. - T. asks SS. to write the unknown word in a free square - T. activates students' prior knowledge then ask them to analyze the words around the unknown word to find the clues which help in figuring out the meaning of the unknown word. - SS. predict the meaning of the unknown word depending on contextual clues. - T. asks SS. to verify their prediction by looking at dictionary. - SS. work individually or in groups and verify their prediction by looking up the dictionary. - T. asks SS. to give meaningful sentence using the new vocabulary. - T. continuo reading the passage till he/she comes across another unknown word.	25 minutes	

3- link the new vocabulary with a visual association	Evaluation	<ul style="list-style-type: none"> - SS. draw images which represent the new vocabulary meaning in a free square in the PAVE map. - revise adding the negative prefix to the adjective. 	5 minutes
4- use the new vocabulary correctly in the fill in gap question	Evaluation	- SS. do the Ex. 1 and Ex. 2	7 minutes
	Homework	-	

Grade: 11	Unit 5	Title: let's go for a walk	Period: 2	Grade: 11
New vocabulary	ownership – rambling - achievement			
Resources and materials	Pupils book- pictures—dictionary- PAVE map			
Objectives	Stage	Activities and procedures	Time:45	
SS. expected to:	Warming up	SS. play the game of find the lie	5 minutes	
1- describe their experience of walking	Revision	T. asks students if they go for a walk. If yes, with whom and why.	5 minutes	
2- figure out the meaning of the new vocabulary introduced in period 2	Presentation	<ul style="list-style-type: none"> - T. reads the passage till he comes across the unknown word. - SS. Read again the sentence in which the unknown word is involved. - T. asks SS. to write the unknown word in a free square - T. activates students' prior knowledge then ask them to analyze the words around the unknown word to find the clues which help in figuring out the meaning of the unknown word. - SS. predict the meaning of the unknown word depending on contextual clues. - T. asks SS. to verify their prediction by looking at dictionary. - SS. work individually or in groups and verify their prediction by looking up the dictionary. - T. asks SS. to give meaningful sentence using the new vocabulary. - T. continuo reading the passage till he/she comes across another unknown word. - T. asks SS. to give meaningful sentence using the meaning of the 	23 minutes	

		new vocabulary	
3- link the new vocabulary with a visual association	Rounding up	- SS. draw images which represent the new vocabulary meaning in a free square in the PAVE map - revise adding the suffix ship to the words.	5 minutes
4- find the synonym of the new vocabulary	Evaluation	-SS. do the exercises (Ex.1 & Ex2) on . 51	7 minutes
	Homework	do the exercises (Ex.3) on P. 51	

Grade: 11	Unit 5	Title: let's go for a walk	Period: 6	Grade: 11
New vocabulary	touch- amuse – amaze			
Resources and materials	Pupils book- board - PAVE map- worksheet			
Objectives	Stage	Activities and procedures	Time:45	
SS. expected to:	Warming up	-T. asks SS. to mention their feelings in different situation	5 minutes	
1- give their opinion about the topic of the unit	Revision	- T. revises Ex. 3 with SS. - T. discusses the students' opinion about the rambling with SS.	5 minutes	
2- figure out the meaning of the new vocabulary introduced in period 1 and turn the verbs into nouns	Presentation	- T. reads the passage till he comes across the unknown word. - SS. Read again the sentence in which the unknown word is involved. - T. asks SS. to write the unknown word in a free square - T. activates students' prior knowledge then ask them to analyze the words around the unknown word to find the clues which help in figuring out the meaning of the unknown word. - SS. predict the meaning of the unknown word depending on contextual clues. - T. asks SS. to verify their prediction by looking at dictionary. - SS. work individually or in groups and verify their prediction by looking up the dictionary. - T. asks SS. to give meaningful sentence using the new vocabulary. - T. continuo reading the passage till he/she comes across another unknown word. - T. asks SS. to give meaningful	22 minutes	

		<p>sentence using the meaning of the new vocabulary.</p> <p>- T. writes the rule of turning the verb into nouns on the board.</p>	
3- complete the sentences using the -ing- form	Rounding up	<p>-SS. apply the rule by answer exercise 2 on P. 56</p> <p>- SS. draw images which represent the new vocabulary meaning in a free square in the PAVE map.</p>	6 minutes
4- use the new vocabulary in varied exercises	Evaluation	- SS. do the exercises on the worksheet	7 minutes
	Homework	-SS. write a short paragraph using the noun of the new vocabulary.	

Appendix(5): Referee committee

No.	Name	Qualification	Institute	Achievement test	Teacher's guide
1	Abd El mo'ti Al Agha	Professor of Curriculum and Teaching of Social Studies	Islamic University	/	
2	Dr. Hassan Abu Jarad	Ph.D. Applied English Linguistics	Al Azhar University	/	
3	Basil S. Skaik	Assistant Professor in TESOL	Al Azhar University	/	
4	Dr. Mohammad Hamdan	Associate Professor of English methodologies	Gaza University	/	
5	Mrs. Yosra Ammar El Kahloot	Supervisor of English	North Gaza Directorate of education	/	
6	Mr. Yehya Alaf	Supervisor of English M. ed. Methodology	Khanyounis Directorate of education	/	
7	Mrs. Amal Abu Sharar	Supervisor of English M. ed. Methodology	Central Directorate of education	/	
8	Mrs. Faten Hamad	Assistant of headmaster M. ed. Methodology	Tal Al Rabee' secondary school for girls		/
9	Miss Jihan Abu El rous	English teacher of 11 th grade	Al Kuwait Secondary school	/	
10	Heba Abu Jarad	English teacher of 10 th grade	Hamad Ibn Khaifa Secondary School		/
11	Mona Mohammed Qarmout	English teacher of 12 th grade	Awni Al Hertani Secondary School		/

Appendix (6): PAVE Map

Sentence from the text:

Word

Predicted Definition:

One Good Sentence of My Own:

Association or Symbol

Verified Dictionary Definition:

Another Good Sentence of My Own:

Appendix (7): Clues of different types

Context Clues	Explanation	Common Signal Words	Example
Definition/ Restatement	The unknown words is stated in a dictionary form	are, is, or, that is, also known as, which is to say, sometimes called, meaning, is defines as, means, Note: commas, parentheses and dashes that set a word or phrase apart from the rest of the sentence could also be a signal	A school is a an institution that provides the teaching for students.
Synonym	a word that has a similar meaning to the unknown word	likewise, like, especially, or, in that, similarly, in other words, that is, and Note: commas, parentheses and dashes that set a word or phrase apart from the rest of the sentence could also be a signal	His simple glance was a harbinger of danger. That is , his eyes were signs foretelling rough waters in their relationship.
Antonym	a word that has an opposite meaning to the unknown word	different, unlike, though, opposite, by contrast, but, some...but others, on the other hand, not, despite, although, yet, then again, whereas	Now they were confident, despite their usual diffidence . Diffidence = Lacking confidence
Example / List	examples of the unfamiliar word are given through what the word or phrase might be like, not what they have in common	such as, for example, including, for instance, in one case	Some animals are omnivores . Bears, for instance , eat whatever meat or plants they can find.
	if this happens... this will happen	Because, so, therefore, consequently, since, as a result, if... then, due to	Because the horse was so fatigued , he

Context Clues	Explanation	Common Signal Words	Example
Cause& Effect			collapsed before he finished. Fatigued = tired
Compare & Contrast	by comparing, you how words are alike. by contrasting, you know how words are different	especially, like, likewise, also, and, as well as, that resembling, identical, similar to, as, in the same way unlike, on the other hand, in contrast to, on the contrary, however, different from	My brother is enthralled by birds similar to the way that I am fascinated by insects.
Description/ Inference	Determining meaning through using prior knowledge, a prediction of meaning by context clues.	n/a	When Joe’s dog passed away, he was filled with grief . You know that if your cat died, you will feel sad.

Appendix (8): Photos from the experiment





Appendix (9): Examples of Some Students' Drawing

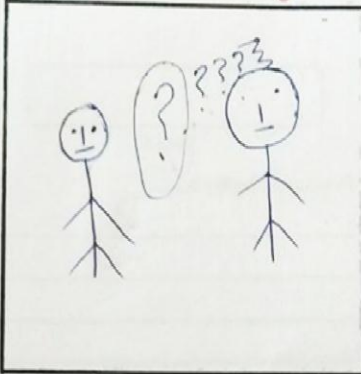
PAVE Map

Sentence from the text:
I wanted to be homeless, worried about where to lay my
head & then be rescued by the kindness of strangers.

strangers

Word

Predicted Definition:
some one that I don't
knew



Association or Symbol

One Good Sentence of My Own:
I met a new stranger last night.

Verified Dictionary Definition:
A person who are unfamiliar

Another Good Sentence of My Own:
Don't talk to strangers.

PAVE Map

entence from the text:

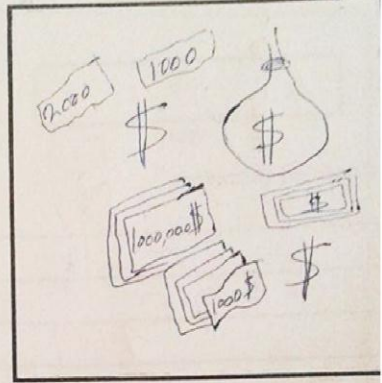
many hotels and tour operators are owned by
foreigners. They take their profits out of the country

Profit

Word

redicted Definition:

money



Association or Symbol

ne Good Sentence of My Own:

I want to have a lot of money

efined Dictionary Definition:

money gained by business /
sold it for more than it cost them

other Good Sentence of My Own:

I gained a lot of profits

PAVE Map

Sentence from the text:

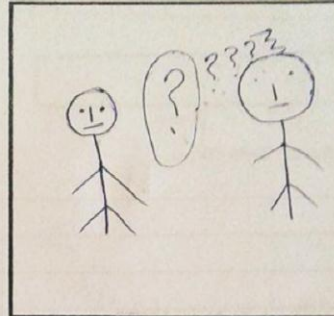
I wanted to be homeless, worried about where to lay my head last night & then be rescued by the kindness of strangers.

strangers

Word

Predicted Definition:

some one that I don't know



Association or Symbol

One Good Sentence of My Own:

I met a new stranger last night.

Verified Dictionary Definition:

A person who are unfamiliar

Other Good Sentence of My Own:

Don't talk to strangers.

PAVE Map

Sentence from the text:

he began to notice ~~was~~ irrevesible changes

preserve

Word

Predicted Definition:

not buy sell



Association or Symbol

One Good Sentence of My Own:

My father will not preserve his company

Verified Dictionary Definition:

to keep sth or someone alive / safe them from destruction

Another Good Sentence of My Own:

My mom preserve vegetables before Ramadan

Appendix (10): letter of permission and approval

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

**الجامعة الإسلامية غزة**
The Islamic University of Gaza

مكتب نائب الرئيس للبحث العلمي والدراسات العليا هاتف داخلي 1150

الرقم: ج س ع /35/ Ref:
التاريخ: 2016/11/12 Date:

الأخ الدكتور/ وكيل وزارة التربية والتعليم والعالي
حفظه الله،،
السلام عليكم ورحمة الله وبركاته،

الموضوع/ تسهيل مهمة طالبة ماجستير

تهديكم شئون البحث العلمي والدراسات العليا أطهر تحياتها، ونرجو التكرم بمساعدة الطالبة/ أسماء محمود عبد الرحمن بدر، برقم جامعي 220140019 المسجلة في برنامج الماجستير بكلية التربية تخصص مناهج وطرق تدريس في تطبيق أدوات دراستها والحصول على المعلومات، لمساعدتها في اعداد رسالة الماجستير والتي بعنوان:

فعالية استخدام استراتيجية PAVE في تعلم مفردات اللغة الانجليزية و استيقانها لدى طلبة الصف الحادي عشر

والله ولي التوفيق،،

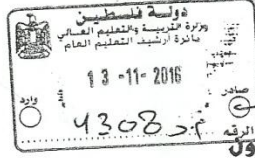
نائب الرئيس لشئون البحث العلمي والدراسات العليا

أ.د. عبدالرؤف علي المناعمة

صورة إلى:-
☐ الملف.



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الرقم: وت.غ مذكرة داخلية ()
التاريخ: 2016/11/13 م
الموافق: 13 صفر، 1438 هـ

المحترمون

السيد/ مدير التربية والتعليم شمال غزة

السلام عليكم ورحمة الله وبركاته،،

الموضوع/ تسهيل مهمة بحث

تهديكم أطيب التحيات، ونتمنى لكم موفور الصحة والعافية، وبخصوص الموضوع أعلاه،
يُرجى تسهيل مهمة الباحثة أسماء محمود عبد الرحمن بدر والتي تُجري بحثاً بعنوان:
"فعالية استخدام استراتيجية PAVE في تعلم مفردات اللغة الإنجليزية واستبقائها لدى طلبة الصف الحادي عشر"
وذلك استكمالاً لمتطلبات الحصول على درجة الماجستير في كلية التربية الجامعة الإسلامية بغزة، تخصص
مناهج وطرق تدريس، في تطبيق أدوات البحث على عينة من طلبة الصف الحادي عشر في المدارس الثانوية
بمديريتكم الموقرة، وذلك حسب الأصول.

وتفضلوا بقبول فائق الاحترام،،،

أ. رشيد محمد أبو جججوح
نائب مدير عام التخطيط التربوي



نسخة:
السيد/ وكيل وزارة التربية والتعليم العالي
السيد/ وكيل الوزارة المساعد للشؤون التعليمية
السيد/ وكيل الوزارة المساعد للشؤون التعليمية العالي
الملف.
المحترم
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