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**Effects of Multimedia Glosses on Aiding Vocabulary Acquisition in
EFL Environment**

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Abstract

This study investigates the effects of multimedia annotations in CALL environment on the acquisition of English vocabulary for Yemeni EFL learners. Sixty freshmen students were randomly assigned to read stories either on computer screen or in printed text. They were divided into two groups; experimental group received treatments through multimedia software, control group received the same treatment but with traditional printed texts.

Vocabulary pre-test and immediate test were administered to both groups.

Four weeks later, a vocabulary delayed post-test was administered to both groups to check word retention. Participants of multimedia group were asked to fill in a short questionnaire to see their attitude towards the use of multimedia software.

Results showed that experimental group scored higher than control group on the immediate posttest, and a decline in the delayed posttest of control group was greater than that of experimental group. Findings of the test revealed that learning occurred effectively through multimedia CALL. The study discusses the findings of the study on the light of theories of multimedia learning and suggests for future research.

Key words: multimedia, acquisition, glosses, CALL, vocabulary, EFL

Introduction

Vocabulary acquisition has become the key concern of the most recent study in foreign/second language acquisition (Nation, 2000; Mac Carthy, 1999; and Laufer, 1997). Researchers believe that the most problematic gap that faces second language learners in communication is the lack of sufficient vocabulary knowledge (Coady, 1997).

According to Wilkins (n.d) as cited in Thornbury 2002) “without grammar very little can be conveyed, without vocabulary nothing can be conveyed”. Vocabulary affects the understanding of the second language text which cannot be obtained unless there is much knowledge of words of that language.

Laufer (1997) asserts that “no text comprehension is possible, either in one's native language or in a foreign language without understanding the text's vocabulary”.

Read (2000) points out the importance of acquisition of L2 words by describing words as “the basic building blocks of a language, the units of meaning from which larger structures such as sentences, paragraphs and whole texts are formed”.

Nikolva (2004) states that foreign language vocabulary is viewed as a primary factor in successful communication and, to a great extent, in high level reading ability. Seglar (2001) points out that vocabulary is basic to communication and often seems as a source of problems for the second language learner; Krashen (1989) expresses the importance of vocabulary acquisition in this sentence “when students travel, they don't carry grammar books, they carry dictionaries.” (Krashen, as cited in Ellis, 1995).

Computer Technology for Language Learning

The introduction of computer technology particularly multimedia / hypermedia facilities has encouraged the researchers to adopt it to the field of language learning. Multimedia technology allows a variety of media (text, graphics, sound, animation, and video) to be accessed on a single machine. The combination of media (text, sound, and video) makes learning more effective than one medium or some of media parts.

Most people seem to remember more efficiently what they experience rather than for example what they have just read. Memory is also associated with images, and multimedia provides opportunities to experience language in a variety of media. Learners can focus on language areas that they decide they need help and ignore others.

Multimedia provides learner's autonomy to decide what to study, when to study, how to study, and how long to study. CD-ROMS can be used in a variety of ways within different learning situations. Also they are used as a self access resource. The material on CD-ROMs can be linked

to courses, syllabuses, or assigned to learners for homework or as follow up activities to work undertaken classroom session (Brett, 1998). One of the guidelines for multimedia learning is that text accompanying a picture or animation should be presented in spoken text, rather than visual text. Presenting information visually and textually leads to a more efficient use of memory. Consequently, this leads to long term retention of words (Tabbaras, 2002).

Literature review

For the purpose of this study the terms “glosses” and “annotation” are used interchangeably. The area of vocabulary acquisition has received attention by researchers. Precisely the studies have focused on the impact of glossing individual words through different multimedia modalities (dynamic video, static pictures, animation, graphic) to check their effectiveness on aiding second language vocabulary acquisition (Chun & Plass, 1996; Plass, Chun, leutner, Mayer, 1998; 2003; Al-Seghayer 2001; Nikolova 2002; Yoshii, 2006; and Yanguas; 2009).

These studies investigated different variables with multimedia annotation which might affect second language vocabulary acquisition. All studies concluded that multimedia annotations had positive effects on aiding L2 vocabulary acquisition. However, these studies varied in using vocabulary assessment methods, language annotations type, kind of participants for foreign language / second language learners.

Studies in reading comprehension activity tried to investigate the efficacy of particular modes over the other, namely, which was the more effective mode for facilitating L2 vocabulary: dynamic video or static picture. Findings of these studies were inconsistent in terms of the superiority of one mode over the other.

Chun & Plass (1996) found that students were aided more by static pictures than video clips. On the contrary, Al-Seghayer (2001) found that students performed significantly better on video clips than those of static pictures.

The contradictory findings of both studies were justified in that both studies used different inputs such as the material, the language annotation types, and the kind of assessment tools used for both studies. Therefore, the two studies led to inconclusive results (Mohsen & Balakumar, in press). However, both studies favored using image based annotation for second language vocabulary acquisition.

Studies in L2 reading investigated the effects of the type of glosses which facilitate vocabulary acquisition either in L1 or L2. Jacobs, Dufon, and Fong (1994) examined the preferences of learners towards the type of glosses. 85 participants were involved to read a Spanish passage under three conditions: L1 (English) gloss; (2) L2 (Spanish) gloss; and (3) No gloss. Students were asked to write a recall passage and translate the glossed words. Four weeks later the same test was administered. Results showed no significant differences in long term retention of words. However, the post-test's result revealed the superiority of glossed group in translation.

Yoshii (2006) went further by comparing the efficacy of L1 glosses and L2 glosses on aiding L2 vocabulary learning. 155 Japanese students were invited to read an online story which contained 14 annotated words. Students read story under four conditions; (1) L1 text only; (2) L2 text only; (3) L1 text plus picture; and (4) L2 text plus picture. Posttests as well as delayed test were administered. Result showed no significant differences between the two types of glosses.

Studies examined the learning styles that learners (visualizers or verbalizers) could actively benefit from multimedia vocabulary annotations. Plass, Chun, Leutner & Mayer (1998) examined learning styles on 103 German students who were fluent English speakers. They were asked to read a story with 24 words which had verbal annotations and visual annotations. Students were asked to translate the annotated words into L1. The result showed that participants acquired vocabulary better when they used both visual and verbal annotations. Moreover, the participants recalled the translation of German words better if they were given their preferred mode of annotations.

In another study for the same scholars, Plass et al (2003) examined the effects of multimedia annotations on learning German vocabulary for learners who had different verbal and spatial abilities. One hundred and fifty-two English-fluent students enrolled in a second-year German course read a 762-word German story presented by a multimedia computer program. Students either did not receive any annotations, or received verbal annotations, visual annotations, or both, for 35 key words in the story. The researchers used different cognitive tests to measure verbal and spatial abilities (whether high or low). Results showed that spatial learners were helped by graphic information, but learners with low spatial abilities were not aided by visual annotations of unknown words. They discovered that learners with different cognitive abilities were aided by their cognitive abilities. Learners with high spatial ability benefitted from visual annotations whereas learners with low spatial abilities were not helped by visual annotations. They concluded that when learners with high verbal ability processed both visual and verbal annotations, it would result in a high cognitive load and this would negatively affect their learning.

Approaches of Multimedia Language Learning

There are three approaches employed to the studies used multimedia annotations: Paivio's (1971-1990) dual coding theory, Chandler and Sweller's (1991) cognitive load theory, and Mayer's (1997-2001) generative theory of multimedia learning.

Paivio's (1971-1986) dual coding theory assumes that information is coded dually in human mind either verbally (text and sounds) or non-verbally (picture, or objects). These two systems are interconnected to each other, in other words when words are represented by one system (verbal system) and they can be activated by the other system (non-verbal system) or vice-versa. The theory states that when information is presented dually through two systems, learning will be more effective when information is presented singularly.

The cognitive load theory (CLT) is concerned with working memory capacity. CLT suggests the working memory capacity is very limited. Hence, presenting too many elements to be processed in visual and verbal working memory can lead to cognitive overload. Therefore, materials and instructions should minimize the chances of overloading.

The third theory which is famous among researchers and practitioners is generative theory of multimedia learning. The theory assumed that learner had to select verbal and pictorial annotations and as a result of selection, human mind created verbal and visual representation of the information processed then to organize these representations into coherent and mental representations and also to build connections between the two types of systems and integrate this information with prior knowledge in working memory.

Multimedia Annotations in Listening Context

Another line of studies (Jones & Plass, 2002; Jones; 2003; 2004; 2006; and 2009) dealt with effects of multimedia annotations on L2 vocabulary acquisition in receiving L2 aural multimedia environment. Results of the above studies were inconclusive in term of the effects on vocabulary acquisition.

Having a look at the multimedia annotations literature, one can find some limitations to the studies mentioned above.

The studies were carried out to participants whose native language was closer to the target language in orthography. Therefore, they may not be generalized as effective to other participants whose mother tongue has different scripts other than Latin script.

Another issue that restricted findings of those studies is the assessment tools method conducted to measure the receptive knowledge as they tested students in translation (Mohsen & Balakumar, in press). This study tries to adopt the multimedia annotations to Arab EFL students whose native language has totally different orthography.

To the best of the researcher's knowledge, no further empirical study has examined the effects of multimedia glosses on EFL situation in Arab world. Therefore, there is a need to check the efficacy of multimedia glosses on such Arab situation and whether EFL students can get benefit from the technique of glosses.

Research Question

This research attempts to answer the following question:

What is the effect of a multimedia CALL program with audio pictorial textual annotations on English vocabulary scores?

In order to answer the research question, the following null hypotheses are generated:

1-There is no significant difference in vocabulary scores between experimental group learning vocabulary through multimedia CALL and control group learning through a traditional printed text.

2-There is no significant difference between the immediate posttest and delayed posttest in vocabulary scores of experimental group and control group.

Participants

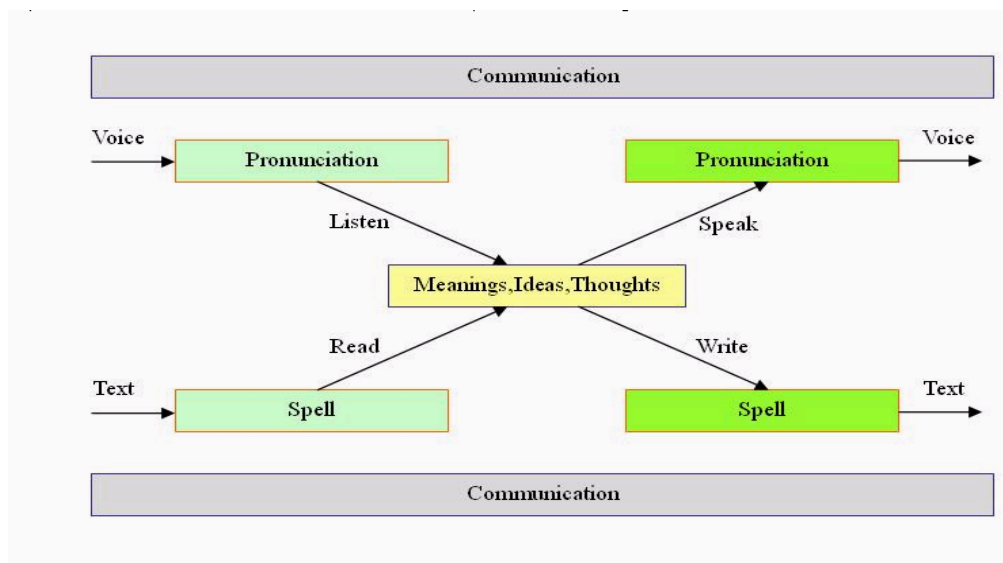
The population of the study consists of 162 students who study English as a foreign language. They have enrolled in the first level in the English department – Ibb University. All students of the two treatments participated in the study, but only 60 students were randomly chosen to form the sample of the study; 24 female students who accounted for 40 % and 36 male students who accounted for (60 %. Table (1) shows the frequency distribution of gender by treatment conditions.

Table (1): Demographic information about the participants of the study.

GENDER					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	36	60.0	60.0	60.0
	female	24	40.0	40.0	100.0
	Total	60	100.0	100.0	

Multimedia Software

The software program that was used in this study is a multimedia-based vocabulary called Wordhacker which aimed to help L2 learners improve their English vocabulary. The theoretical background of WordHacker program is communicative based. It is based on Ellis's(1995) view of what it is to learn a word , what are the processes through which a word goes and gets stored into our mental lexicon, how to understand speech , to read a word ,to say a word , and to write a word and how communication might occur through the interconnection of channels. The following snapshots from the program show these criteria.



A snapshot of the criteria of the program

Images

The mages page functions as an embedded web browser to search the current word on Internet automatically. The web site is <http://google.com/imghp> by default. The images would be saved in the local directory by one click; it did not need to access internet to see them next time when one opened up the program.



Screen shot of the program showing the picture of the word 'bear'

Procedures

The study was conducted on multimedia language lab setting in students' scheduled regular classes. The multimedia program had already been downloaded on the computer and presented on a large screen. Passages were presented both on computerized screen and printed texts. Four passages were selected by the researcher to be taught to students in normal class hours. The selected passages consisted of vocabulary for the following topics; papers, animals, roads, and accidents. The teachers of the first level students, who were the content experts, confirmed that the selected passages were suitable for students (Appendices 1, 2, 3 & 4).

The experimental procedures consisted of different phases:

First, the researcher administered the pre-test for 20 minutes to both groups. Then, the researcher gave students a brief introduction to the program, its objectives and its methods. The researcher took eight classes in students' normal class hours (1.30) hour for both control and experimental groups. Passages (Appendix 1) were processed with power point program and presented on the data show. Then students could access the passages themselves by opening the program that was already installed to desktops' computers. Words are typed inside the program by bold size. Target words are annotated with text, (definition; examples; and some words are illustrated with synonyms and antonyms) sound, (single words, definitions and examples were pronounced), and google images.

One experimental group received computerized passages with multimedia annotations and printed texts whereas a control group received only a traditional printed texts. Afterwards, participants were asked to take a vocabulary posttest for 20 minutes (both groups). Four weeks later, a delayed test was administered to both to check word retention.

Vocabulary Test

A vocabulary test was designed in order to assess the effects of multimedia annotations on aiding English vocabulary acquisition (Appendix 2). The test consisted of 37 concrete and abstract words and was administered to participants in eight classes. Two types of test were administered: recognition and production (Appendix 5).

The recognition test required participants to answer multiple choice items with four alternatives and yes/no questions. The test consisted of 28 items (24 multiple choice items and 4 yes/no questions) and 28 words were annotated textually, (definitions, examples, roots, word classes) verbally and pictorially (already linked with google images).

Questionnaires

After they had their pretest, immediate and delayed post tests, students were asked to complete a questionnaires to check their attitude to the use of multimedia. The researcher went through

their responses to the test, analyzed their mistakes and discovered components of the multimedia where their weaknesses lie. Based on the purpose of the research, the researcher designed a questionnaire to see their opinions about modalities of the used multimedia (clarity of the text and example and pictures depicting meanings of words) (see the questionnaire on appendix 6). The questionnaire contained 15 items in Likert's five points format (strongly agree, agree, undecided, disagree, strongly disagree). The questionnaire was given to the experimental group since they were multimedia centered. Only 26 participants responded and 4 dropped for certain reasons (illness ...etc).

Results

The level of significance at which the hypotheses in the study were tested was $\alpha = .05$. The data were analyzed via the statistical package SPSS, version 11.5

The results of the pretest, post-test, delayed posttest mean scores, standard deviations for group 1 (the multimedia group) and Group 2 (the traditional printed text group) have been calculated and are presented in the tables (1 & 2).

	N	Maximum	Minimum	Mean	Std. Deviation
GROUP	30	2.00	2.00	2.0000	.00000
PRETEST	30	36.00	15.00	22.4667	4.36864
POSTTEST	30	37.00	22.00	29.2667	3.98214
DELAYED TEST	30	34.00	18.00	24.4333	3.78457

Table 1 Descriptive statistics of control group.

Table 2. Descriptive statistics of the experimental group.

	N	Maximum	Minimum	Mean	Std. Deviation
GROUP	30	1.00	1.00	1.0000	.00000
PRETEST	30	18.00	29.00	23.0333	2.45628
POSTTEST	30	25.00	41.00	33.9333	5.09180
DELAYED TEST	30	24.00	41.00	32.5000	4.91128

The test gains (pre-posttest & pre-delayed-test) are shown in table (3).

Gain	Experimental group	Control group
Gains-Pre-posttests	10.9 (47.32%)	6.8 (0.03%)
Gains pre- delayed tests	8.07 (33.03%)	5.71 (29.89%)

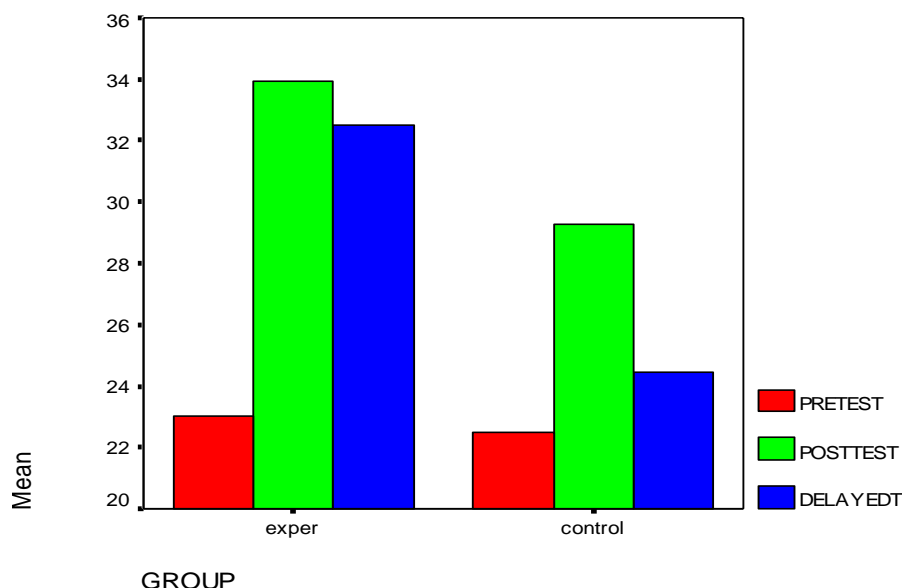
Table: 3 explains tests gains of the groups

It is worth noting that the experimental group showed larger gains than the control group. As it is shown in the table above (5), gains resulted from pre-posttest of experimental group approximately are 47% whereas gains of control group shows only .03%. This is inconsistent with the first null hypothesis of the study, so null hypothesis is rejected.

The Post-Delayed gains of experimental group showed higher than control group, about 33.03% whereas control group had only 29.89%. A decline of the post delayed test scores of control group was observed. Also this is inconsistent with the second hypothesis of the study in favor of directional hypothesis which proves that there is a statistically significant difference between scores of delayed posttest to both groups for experimental group.

Means between groups prove that experimental group got higher than control group. X of multimedia group's posttest=33.93 whereas X of control group =29.26. The standard deviation of the posttest for multimedia group is 5.09 whereas standard deviation of the posttest for control group is 3.98214.

The graphical representational of means can be seen in the given figure (4) below.



The effects of the treatment (multimedia group) was initially examined with multiple regression, the posttest, which had a high correlation ($R = .92$; $p = .000$) with delayed posttest, was chosen as the dependent variable. Initial results indicate that the pretest is the most significant predictor of success on the posttest ($R = .348$; $p = .006$) when the treatment is entered into the equation, it indicates the significant effect due to the treatment.

MANOVA was run with dependent variables. The repeated measures analysis was performed on the significant differences of tests. Multivariate test for "Within Subjects" revealed significant Time effects. This means that significant differences occurred across pretest, posttest, and delayed test $F = 52.53$.

Wilks' Lambda test is used to test whether there are differences between the means of identified groups of subjects on a combination of dependent variables (Crichton, 2000). Eta squared of Wilk's Lambda $= 0.874$, $p = .000$ showed the effect of time on treatment (see table 5). It indicates that there is a statistically significant difference for the multivariate test, p value $= .000$ shows that there is a statistically significant difference between two groups (treatment) on the set of the dependent variables (Time, 1, 2, 3) pretest, posttest, and delayed test. Also, multivariate test reveals the homogeneity of groups and shows significant differences of results in all tests $p < .005$, it is indicated with Mauchly's Test of Sphericity $p = .000$ which is significant.

Test	Value	F	Hypothesis	error	Sig	Eta Squared
Pillai's	.12	201.61	2.00	58.00	.00	.87
Wilk's	.12	201.61	2.00	58.00	.00	.87
Hotelling's	6.95	201.61	2.00	58.00	.00	.87
Roy's Largest	6.95	201.61	2.00	58.00	.00	.87

Table 5 shows the multivariance for the groups.

It indicates that there is a statistically significant difference for the multivariate test, $p = .000$ shows that there is a statistically significant difference between two groups (treatment) on the set of the dependent variables (Time,1,2,3) pretest, posttest, and delayed test. Also multivariance test reveals the homogeneity of groups and shows significant differences of results in all tests $p < .005$, it is indicated with Mauchly's Test of Sphericity $p = .000$ which is significant.

Analysis of the Questionnaire

First, the data from the questionnaire is converted numerically. In order to test for differences between the items of the questionnaire, bivariate analytic techniques were employed. Chi-square is used to test the significant differences of the items. The researcher analyzes the items that serve the research purpose and ignores those items which are related to their attitude to multimedia (opinion and motivation).

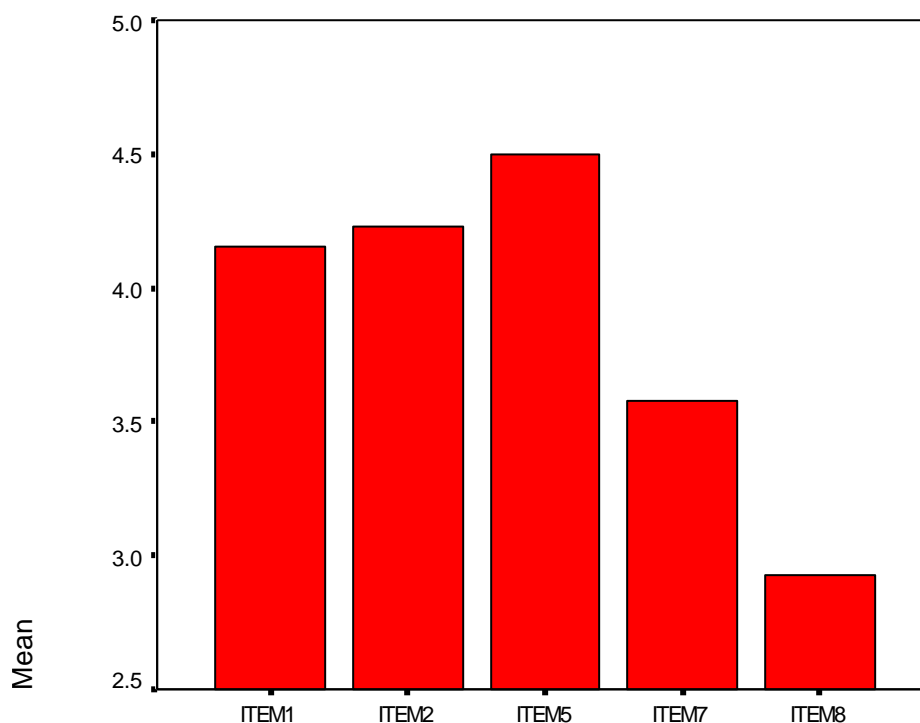
1-Chi-square reveals the significant differences for the item (1) (learning is effective through multimedia) $p = .000$ which is highly significant.

2-Chi-square is also significant for the fourth item (pictures depict the meaning through the use of multimedia) $p = .005$.

3-Also, chi-square is highly significant for remembering words through multimedia (the seventh item) $p = .001$.

4-Chi-square is not statistically significant for the eighth item that's multimedia is deceptive $p = .132$ whereas the second item (learning through multimedia is enjoyable) gets a high significant difference $p = .03$.

The following table and representational graph demonstrate the significant differences



In summary, results revealed a statistically significant difference between scores of multimedia group and traditional printed text group in favor of multimedia group. This is consistent with literature and proves the advantage of multimedia annotations in learning vocabulary. On the other hand, results show discrepancy with the null hypotheses of the study. Therefore, all null hypotheses are rejected.

Conclusion

This study explores the potential of multimedia annotations for learning new words. The result of this study shows that multimedia annotations have a great impact on acquisition of vocabulary. The more the presentation of multimedia with different modalities (text in combination with sound, picture, video, audio...etc.) the more effective and enjoyable learning is. Result shows that words are learnt better when they are presented with text, illustrated with examples, annotated by audio and images than those learnt with traditional printed text. Also, words are retained and retrieved better when they are presented on more than one mode either verbally or visually since they are stored on long term memory.

The result of the study supports Mayer's (1997-2001) generative theory of multimedia learning as well as Paivio's dual coding theory.

According to the generative theory of multimedia learning, a learner has to select the input first, when the material presented with text, the learner has to select relevant words to be retained as a

text base in verbal working memory. When presented with illustration, the learner must select relevant images to be retained as an image base in visual working memory.

Second, he/she must organize the text base into a coherent verbal representation and an image base into a coherent visual representation. Then, he/she must integrate the verbal and visual representation by making one to one connection between the features of the two (Mayer, 1997).

Paivio's (1986) dual coding theory is based on the assumption that memory and cognition are served by two separate systems, one specialized for dealing with verbal information, such as printed words, and the other for nonverbal information, such as pictures or objects. The two systems are supposed to be interconnected. For instance, pictures can be named and words can evoke images (Paivio, 1986).

The results of this study extend the previous research studies (Chun & Plass, 1996; Plass, Chun, Leutner, Mayer, 1998, 2003, Al-Seghayer, 2001, Nikolova, 2002, Yoshii, 2006, Yanguas, 2009). Learners whose native language is Arabic benefitted from the use of multimedia applications in EFL environment similar to the previous studies' participants who studied the target language as a second language. Therefore, multimedia benefits can be generalizable to participants whose mother tongue's scripts fully contradict the target language (Arabic vs. English).

Limitations and Suggestions for Future Studies

As this study has conducted images plus picture modes, future studies are recommended to examine other modes like video clips or animation. Also, the passages given in this study touched different cultures; there is a need for adopting passages which are closer to participants' culture in order to pay more attention and enhance the noticing which is very important in second language acquisition.

In addition to that, choosing images is very important for acquisition particularly those which carry abstractness because they are difficult to represent the identical meaning for such words. It is recommended to carefully select the images for abstracted words which fully depict the meaning of the target words and to avoid ambiguity of using such images.

Our participants were adult native speakers of Arabic and some of them might have been used to English environment so that they might affect the validity of the tests. There is a need to administer the same treatments to children who may not have been used to English. From them, one may get reliable and valid results.

This study has used a pen and paper test to measure students' achievements. Therefore, it is recommended to administer a computerized test in a language lab where students can obtain their results immediately by the computer.

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Appendix (1)

Passage 1

Paper and Printing

Five thousand years one age men were living in many parts of the world. They lived in caves and wore clothes made of the skins of animals. They hunted with weapons made of stone. At the same time, in other places of the world like India and Egypt, people were living in great cities. They knew how to build temples and palaces. They wore rich clothes and jewels. They also had invented the art of writing.

The Egyptians had a strange way of writing. Their letters were in the form of pictures. Only priests in ancient Egypt could read and write. There was no paper in those days. So the priest used the stems of a plant called papyrus for making their material. The word paper is got from 'papyrus'

The stem of the plant was cut into long thin strips. They were placed side by side. Then other strips were placed across the to make a kind of a mat. This mat was soaked in water, and then it was placed on a flat stone. Finally, after being dried in the sun, it was rubbed smooth with a piece of ivory. It was then ready for use. The priests used coloured links and pens made from grass or straw .They wrote on the sheets of papyrus. They were joined together to make long rolls, called scrolls. The scrolls were rolled on wooden rollers.

Men started making paper as early as AD 105.A Chinese officer created a sheet of paper using mulberry, fishnets and other waste matter. The art of papermaking reached Samarkand in Central Asia in 751. By the 14th century, a number of paper mills existed in Europe. All papers is made

from wood pulp which contains cellulose. The wood pulp is made from logs. In paper mills the logs are striped of bark. Pulping is then done either by grinding up the wood or by cooking it with chemicals. The wood pulp is washed and mixed with water. Now it goes into paper making machines. The machine removes the water and presses the pulp into sheets. The sheets are passed through rollers which give the paper a smooth, hard surface.

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Appendix (2)

Passage 2

Long ago, the Earth was covered in darkness. None of the creatures living there knew what daylight looked like.

One day, all of the animals of the forest gathered together in a clearing. They wondered if it would be better to remain in darkness, or if it would be better to also have light. Deer, Chipmunk, Raccoon, Wolf, Bear, and many other creatures climbed to the top of the highest mountain. The mountain stood so tall that there were no trees on its top, and it was covered only with rocks. Millions of stars blinked in the dark sky overhead. The biggest and most powerful animal in the forest was the bear, and he was the first to reach the mountaintop. Bear stood on the highest peak, looked out over the forest below, and argued for remaining in darkness. He said that the creatures of the forest would be able to sleep better in darkness because there would be no light to keep them awake. Most of the other animals were afraid, and they agreed with Bear. Raccoon said that he did not mind the darkness because he was so smart that he could find plenty of food, even in the dark. Wolf was easy to please, too. She didn't mind the darkness because she could howl in darkness or in light.

But one animal did stand up to Bear. Chipmunk, the smallest of the animals, argued that it would be better to have both light and dark. Chipmunk was very clever. As Bear continued to argue for darkness, she made many good arguments for light.

Slowly, the night passed. Bear grew tired of talking, but Chipmunk chattered on and on, as if she had all of the energy in the world. As the other animals dropped off to sleep, one by one, Chipmunk kept arguing. Finally, the first sunrise ever seen by the animals appeared over the top of the mountain. They woke up and were amazed by what they saw.

Chipmunk began to dance from rock to rock. Bear became angry because he didn't get his way. He roared loudly and ran after Chipmunk. He chased Chipmunk all the way down the mountain. Bear was fast, and he reached out his giant paw to grab Chipmunk. Chipmunk got away, but not before Bear managed to scratch her back with his long claws. And that is why, to this day, you can see stripes on Chipmunk's back!

Appendix 3
Passage 3

The dogsled race was about to begin. Julie's team of dogs was lined up at the starting gate. Julie stood behind them. The air was so cold that she could see her breath. Other teams were lined up, too, and the dogs were excited. Julie kept her eyes on the clock. At exactly ten o'clock, she and the other racers yelled, "Mush!" The dogs knew that meant "Go!" They leapt forward and the race began!

Julie had trained months for this race, and she hoped she and her dogs would win. Hour after hour, day after day, Julie's dogs pulled the sled in order to get in shape for the race.

Now, they ran over snowy hills and down into frozen valleys. They stopped only to rest and eat. They wanted to stay ahead of the other teams. The racers had to go a thousand miles across Alaska. Alaska is one of the coldest places on Earth. The dogs' thick fur coats helped keep them warm in the cold wind and weather. In many places along the route, the snow was deep. Pieces of ice were as sharp as a knife. The ice could cut the dogs' feet. To keep that from happening, Julie had put special booties on their feet.

At first, the dogs seemed to pull the sled very slowly. They were still getting used to the race. But on the third day out, they began to pull more quickly. They worked as a team and passed many of the other racers. Once, one of the sled's runners slid into a hole and broke. Julie could have given up then, but she didn't. She fixed it and they kept going.

When they finally reached the finish line, they found out that they had come in first place! It was a great day for Julie and her dogs.

Appendix 4
Passage 4
An Accident*

There was a serious accident on one of the main roads into Stuttgart this morning. An old lorry broke down in the middle of the road, and the driver couldn't move it. It was eight o'clock, the middle of the rush hour, so it soon created a terrible traffic jam. Drivers got very angry and a

man in a Mercedes tried to go round the lorry. Unfortunately, another car was coming in the opposite direction. The driver braked down and tried to stop, but he couldn't prevent the accident- the Mercedes crashed into the front of his car. The driver of the Mercedes was OK, but the other driver was badly injured and both cars were very badly damaged.

Important Words and Phrases

Taxis use the road; pedestrians use the pavement

The speed limit on motorways in Great Britain is 70 mph

Most petrol stations in Great Britain are self service

Get in the car and remember to fasten your seat belt

The other car was going very slowly, so I decided to overtake.

*Redman .S .(2003) English Vocabulary in Use preintermediate and intermediate. Cambridge University Press

Appendix 5 Vocabulary test

Name:.....

Group:.....

1-Put the correct word in the blank

Leave the dishes to for a while

a-wash b-clean c-soak d-sweep

2-There will be a press conference in the..... of the king

a-palace b-temple c-house d-home

3-A piece of paper for writing on is called

a-a roll b-a scroll c-an ivory d-no one of the above

4-What is the relation of the word smooth & hard:

b-synonyms c-antonyms a-no relation

5-the synonym of the word priest is clergyman (true or false)

6-The synonym of the word pulp is flesh (true or false)

7-Define the word "temple"

8-What is the meaning of the word grind in the following statement;

The elephant grinds its food with powerful teeth

9-Give the correct name of the following pictures"



10-Name the following pictures



11-Bear grew tired of talking, but chipmunk chattered on and on, as if she had all the energy in the world

What does chattered mean?

a-moved slowly b-laughed c-spoke quickly d-argued

12-what does the word amazed mean?

a-surprised b- embarrassed c- afraid d- doubtful

13-A story handed from the past, mostly untrue is;

a-a narration b-a legend c-a novel d-no one of the above

14-a forest is a place in which;

a-trees and bushes covered b-human being live c-there are no creature d-all the above

15-Chipmunk;a raccoon; a bear are examples of

a-wild animals b-domestic animals c-reptiles d-no one of above

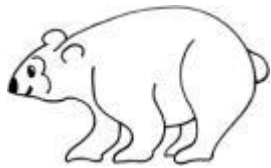
16- Identify the following pictures(deer, bear, chipmunk)

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17-the synonym of the word peak is top (true or false)

18-The antonym of the word clever is intelligent (true or false)

19-How do you describe the action made by a tiger in the following picture;



a-roaring b-chasing c- hunting d-howling

21-Put the correct name of the following picture:



.....

20-A foot of animal with nails is called

a-paw b-claw c-footprint d- all the above

21-What is the synonym of the word leapt?

a-run b- jumped c- went d- win

22-What is the meaning of the word dogsled ?

a-a race of running for dogs b-dog slide in its way c-a vehicle that travels
on snow which is pulled by dogs d-no one of the above

23- A hill is a natural elevation on the earth's surface.....
a-as high as a mountain b-as rugged as a mountain c-not as high and rugged as a mountain
d-higher than the mountain

24-A stretch of land between hills or mountains' often with a river flowing through it is;
a-a forest b-a valley c- a desert d-a farm

25- A soft thick hair covering animal ia called

26-In the following sentence what is the relation of the words sled & slid
one of the sled's runners slid into a hole and broke
a-antonyms b-synonym c-different words d-no one of the above

27- A hollow place in an a solid is called;
a-a dam b-a hole c-a wall d-all the above

28-Name the following pictures



.....
29-What does the word accident mean?

a-A damage happened as the result of a war
b-An event that happened unexpectedly and causes damage and injury
c-A crash between cars that happens expectedly
d-all the above

30-What is the meaning of the word (lorry)?

a-a truck b- a tractor c- a big car d-a big bus

31-A place where road lanes meet is called

a-a roundabout b- a junction c-a traffic lights d-a tunnel

32--the word (pedestrian crossing) means:

a-cars crossing b-passers-by crossing c-trains crossing d-all the above

33-The driver braked hard and tried to stop. 'braked' means;

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a-drove fast b-made a crash c- destroyed d-stopped for traffic sign

35-I shouldn't miss the bus, miss here means

a-not catch b-buy c-drive d-get off

36-The synonym of the word injure is:

a-kill b-save c-get healthy d-hurt

37-A path at the side of a road for people to walk on is:

a-a line b-a lane c- a pavement d-away

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Appendix 6

Dear friends

The aim of this questionnaire is to investigate the effects of multimedia annotations on English vocabulary acquisition of the first level students in English department –Ibb University

Please, read each statement on the left side carefully, the tick the mark (√) on the opinion that you are satisfied with on the right side. Don't worry, the information will be confidential and used for research purpose, it will contribute in developing English vocabulary in the Department.

Name:..... Group:.....

	Item	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1	I learn more words through the use of multimedia					
2	The integration of text, sound, and picture makes learning more engaging and enjoyable					
3	The use of multimedia makes me more attentive to what's being taught					
4	The use of pictures on a multimedia program fully depict the meaning of concrete words					
5	The use of pictures on a multimedia program fully depict the meaning of abstract words					
6	I can comprehend the passages with the help of multimedia					
7	I can remember words better when they're presented with audio, picture, and example					
8	The use of multimedia stimulates me just to focus on the media not on the material					
9	The presenting of word definition and example supported with audio and picture facilitate learning unknown words at the time being					
10	The multimedia program helps me check the meaning as many times as I want.					
11	I can get a control over vocabulary acquisition using multimedia program					
12	I can increase my English vocabulary through intensive use of the multimedia program.					
13	I can learn English vocabulary faster and clearer when using multimedia program					
14	I want my teacher to use a multimedia program when teaching vocabulary					
15	I think a multimedia program is accessible and easy to use					

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