

## VISUAL INSTRUCTION: AN ADVANTAGE OR A DISADVANTAGE? WHAT ABOUT ITS EFFECT ON EFL LEARNERS' VOCABULARY LEARNING?

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### ABSTRACT

*Learning vocabulary is an important issue for second or foreign language learning. The purpose of this mixed methods study was to investigate the effects of visual materials such as pictures, real objects, and flash cards on EFL learners' vocabulary learning. Forty six female intermediate students participated in this study. First, the participants were randomly assigned to either the control or experimental group. Then the two groups were administered the pretest. During the eight sessions of the treatment, 56 vocabulary items were instructed to the participants in both groups. The experimental group was instructed the words visually, while the control group was taught the words traditionally. After the treatment, the two groups were administered the posttest. The findings showed a noticeable progress of the experimental group in learning words. It was found that the learning of words in the experimental group significantly increased more than that in the control group. Further, the participants in the experimental group perceived visual instruction as an effective way for learning vocabulary.*

**Keywords:** Visual instruction; vocabulary; visual materials; EFL learners

### INTRODUCTION

Teaching foreign language vocabulary is an important issue in language leaning. It is a good component for all language classes. Teachers of foreign language know how important vocabulary is. According to Hatch and Brown (1995), vocabulary means different words which are used by all speakers in all languages. As we see the use of visual materials like pictures in teaching and learning is increasing. As a result, language teachers use different types of teaching materials to explain the meaning of new words. The use of visual materials is useful and it is an important way of vocabulary learning.

As Harmer (2001) maintains, visual things make the learning process easier. As a result, they are used by teachers for better learning. English teachers feel that using visual materials such as pictures, real objects, etc. in teaching new words makes the learning process enjoyable and memorable. Teacher also found that visual elements can motivate students for better learning. If teachers show words and check their meaning, it can be an important and useful way for using pictures. The use of pictures can be better and more useful than other materials. It is suggested that an effective use of visual things like pictures have a positive outcome and it results in better learning (Nelson, Reed, & Walling, 1976).

As Danan (1992) stipulates, language teachers use different visual materials so that they can increase students' interaction and motivation in the classroom. The use of different types of visual materials can be helpful for teacher, too (Horn, 1998). Visual aids can provide useful and suitable solutions for problems of language teachers. If teachers use visual and verbal aids together, the students' learning is better (Mayer & Sims, 1994). According to Levin and

Mayer (1993), visual elements increase students' learning because there is more concentration for them.

The result of this type of research will be useful for teachers. Some teachers have concluded that there are benefits from the use of visual materials for learners with different ages. Likewise, Koren (1997) points out that the learning of foreign words with pictures can be easier and memorable than the words without pictures. Because of this, many teachers in English language classrooms use photo dictionaries to increase the extent of vocabulary and speaking skills of the learners. Visual elements such as pictures can be an important and suitable solution for many problems (Horn, 1998). There are many research studies on learning vocabulary by pictures or examples. Further, Underwood (1989) has concluded that visual memory plays an important role in learning. For learners, memorizing words by using visual objects is more effective than memorizing via only the text.

Vocabulary learning is crucial for learning foreign languages. Most of time it is not easy to remember some vocabulary items; therefore, the researchers investigated to increase student's learning through visual elements. According to French Allen (1983), if teachers use visual materials, students' learning will be better than the time when they use other materials. The aim of the researchers of this study was to investigate whether pictures would encourage students to learn words better. According to Nelson, Reed, & Walling (1976), the use of visual materials such as pictures is an effective method and it has good results.

Based on Hornby's (2004) definition, individuals have the ability for remembering or recalling things such as vocabularies, events, memories and etc. after a short or long time which is called retention. Wileman (1993) stated that we are able to have the ability to interpret, understand all information through visual elements such as pictures. The use of visual elements like pictures or real objects is a good and useful way for teaching, because this way improves students learning. Hence, it is better for teachers to instruct vocabularies visually and also the students feel easy to learn it. There is a good point that we can encourage students by use of pictures for a more useful learning.

Visual materials like pictures have an important role for improving knowledge and leaning process. According to Nelson (1979), visual materials like pictures are very effective for memory as they are various. Moreover, due to Paivio's (1986) dual coding theory which is an interesting theory for some teachers as it contains many implications for learning process.

Mayer and Sims (1994) mentioned that words are learned better through visual elements such as pictures or real objects because the use of pictures is easier and more effective and also images are useful for learning process. In addition, as Armstrong (2000) maintained, if learners learn and memorize vocabulary items through visual materials, this way is more useful than the time when they learn vocabulary items without perception of visual materials and through only text. Harmer (2001) also reported that real objects, some books, newspapers or magazines make the learning process easier. As a result, they are used by teachers for better learning.

Richards, Platt, and Webber (1985) in their study concluded that all of learners are able to have this ability to remember more things after a short or long time. This ability is called retention. Moreover, Nelson, Reed, and McEvoy (1977) stipulated that remembering by pictures or images is better than the words by themselves. Potter and Faulconer (1975) also investigated this issue and they concluded that we can classify pictures better and faster this way.

As Benson (1981) claimed, there are some acknowledgement phenomena that we can process images in various kinds. There are also many research studies that indicate we can read with our left brain hemisphere, while written information or visual things are learned in the right hemisphere. Anderson and Shifrin (1980) cited that it is better to use pictures or images for children because they can learn new vocabulary items easier.

1. Is there any significant difference between visual learning and traditional method of vocabulary learning?
2. Do Iranian students perceive visual instruction activities as leading to more learning than traditional vocabulary instruction activities?

## METHODOLOGY

### Participants

Overall, 46 female students between 16 to 20 years old participated in this study. All participants possessed a similar competency-level of English as a result of the proficiency test and the pretest, respectively. Their native language was Persian. They were randomly assigned to two groups (23 learners in each group).

### Instruments

#### *Background Questionnaire*

In order to elicit subjective information of participants, a background questionnaire was developed by the investigators. It covered issues such as the participants' age, gender, and first language status.

#### *Proficiency Test*

In order to be assured of the homogeneity of the control and experimental groups in terms of English language proficiency, a test of NELSON, series 400B, was administered before the pretest. It proved to have a reliability of 0.74. It consisted of 40 multiple-choice items consisting of grammar and vocabulary. The time allotted was 40 minutes.

#### *Vocabulary Pretest/Posttest*

A test of vocabulary consisting of 20 multiple-choice items was prepared by the researchers and was used both as pretest and posttest. After revision by the researchers and two qualified English teachers, the test was administered to participants as pre and posttest. The test was used to ensure that the participants were not familiar with the new vocabulary items prior to the study and after the treatment, and to measure the effect of the treatment. It was piloted on 20 students of the same level, in order to (a) improve the questions, and (b) determine the time that was needed for participants to finish each test and found to be highly reliable. Their reliabilities were determined to be 0.82 and 0.79, respectively.

### Treatment

In this study, the treatment group comprised 20 students, and received visual instruction by the use of Oxford Photo Dictionary and some flash cards and real objects. The new words were instructed visually by the researcher through different steps such as, introducing the new words, pointing and the group repetition, individual repetition, and question from students. First, the teacher (one of the researchers) introduced a word and also described and wrote it on the whiteboard; hence, different pictures and some real objects and flash cards were shown. Next, the teacher repeated them three times, and then the students were asked to repeat them aloud for better learning. Afterward, visual materials were shown and the

students were asked to say their names aloud. The treatment lasted for eight sessions and each session was about 45 minutes. During the eight sessions of treatment, 56 vocabulary items were instructed to the participants by instructor. It means that each session, the learners were taught seven vocabulary items. On the other hand, the control group comprised 19 students, and the same new vocabulary items were taught by verbal explanation such as synonym, antonym, and definition explanation. Both groups received an equal amount of instructional treatment.

### Procedure

A proficiency test was used to make sure that the two groups were homogenous at the outset by selecting scores between one standard deviation below and above the mean. A pretest and a posttest were given to the learners in both experimental and control groups. The pretest was conducted one day prior to the treatment to both the experimental and control groups, and the posttest was also given with the same number of items administered right after the treatment. In addition, to triangulate the quantitative results and to discover the reasons for the results from the students, qualitative data were also obtained from a survey questionnaire comprising open-ended survey questions.

### RESULTS

To answer the first research question and to explore the effect of treatment on learners' vocabulary learning in each group, a paired sample t-test was run. Further, to explore the significant difference between the two groups, experimental and control, on learners' vocabulary development, an independent samples t-test was run.

Based on the descriptive statistics of the pretest, it was revealed that both groups had almost the same mean score in the pretest. Thus, both groups were homogeneous. The experimental group gained the mean score of 3.217 and the control group received the mean score of 2.826.

The mean scores of both groups showed that there was no significant difference between the groups in the pretest ( $p > 0.05$ ). The data given in Table 1 illustrate the descriptive statistics of the pretests for both groups. The descriptive statistics tabulated shows that both groups performed almost the same on the pretest and there existed no significant difference between the two groups. It should be pointed out that the  $t$ -observed is 1.339.

**Table 1. Comparison of both Groups' Performances on Pretest**

<i>Groups</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>sig</i>	<i>t</i>
Experimental	23	3.217	1.085	0.187	1.339
Control	23	2.826	0.886		

Note: The full score is 20. \*  $p < .05$

As for the descriptive statistics of the posttest, it was revealed that the experimental group using visual instruction outperformed the control group in vocabulary development. The descriptive statistics provided in Table 2 shows that the experimental group outperformed the control group in the posttest and actually there existed a significant difference between the two groups in the posttest-pretest total gain scores ( $t=14.947$ ,  $p < .001$ ). Thus, this study showed that using visual instruction improved the vocabulary learning of the EFL students.

**Table 2. Comparison of both Groups' Performances on Posttest**

<i>Groups</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>sig</i>	<i>t</i>
Experimental	23	16.043	1.5514	0.000	14.947
Control	23	7.695	2.1833		

Note: The full score is 20. \*  $p < .05$

Regarding learners' reflections on their improvement in vocabulary which were obtained via a questionnaire, they reported they could benefit more when they learn the words by visual instruction, and they could remember the meaning of the words better, so this way improved better recall of the words.

With regard to the open-ended survey questions compiled along with the quantitative data, twenty three students in the experimental group were given two open-ended survey question items. It was done in order to assess their perceptions of the visual instruction treated in the experimental group. Item1 "I would like my teacher to use visual materials for teaching words. Do you agree or disagree with the statements? Please briefly describe why you agree or not." and item 2 "Do you have any suggestions about how you would like to learn words?" were intended to investigate students' perspectives of visual instruction activities and to elicit their free views and suggestions of words through the statements.

Overall, the findings of the present study showed that there was a significant difference between the two groups in learners' vocabulary development and the visual instruction enhanced participants' vocabulary ability.

## DISCUSSION

This study is in accordance with such studies as Bush (2007), Avgerinou and Ericson (1997), and Hopkins and Bean (1999). The results are also in line with studies that compared the effect of picture on the students' vocabulary knowledge with explanation and translation (Lewis & Hill, 1985) and with word-mediated learning method or translation of the new words in L1 (Tonzar, et al., 2009).

The finding of the present article is in line with that of other researchers like Carpenter and Olson (2011) who examined the effect of teaching new vocabularies through pictures, and their results showed that both the teacher and students who took part in this study had positive attitudes towards using the pictures. As a result, the findings of the present study indicated that visual materials are an effective method in the vocabulary development of the intermediate EFL learners. They obviously were more able to apply words accurately.

Moreover, this study is also in congruent with the one conducted by Suzanne Stokes (2002) who investigated the effect of using pictures in teaching vocabulary. She felt that pictures attracted the students for better learning. She also felt that when students associate new words with a picture, it is easy for them to remember the meaning of the words. So pictures are a popular way of teaching and learning, and they must be chosen very carefully. Pictures should be suitable both for the language to be taught and for the students. They need to be visible, especially if teachers want to show them to the whole class, they should be big enough for everyone to see. In agreement with Herrington and Kervin (2007), the use of pictures in this study might provide learners with authentic context that reflects the way the knowledge used in the real life.

The participants in the experimental group who received visual instruction were able to more successfully develop the learned items in comparison with the control group that received traditional method of vocabulary learning. Therefore, this study seems to have almost been able to show that the use of the visual instruction method can largely reduce learners' problems in the acquisition of L2 words. According to Armstrong (2000), students can create their own "inner blackboard" and when asked to recall a specific body of information, they call up their mental blackboard and "see" the data written on it.

With regard to Research Question 2, "Do Iranian students perceive visual instruction activities as leading to more learning than traditional vocabulary instruction activities?", the findings show that a majority of students answering the survey questionnaires preferred the visual instruction activities because the activities helped them have more positive attitudes and motivation about the L2 vocabulary learning, shift their learning into learner-centeredness from the teacher-centeredness, be able to authentically use the words in a short-term period of time, and improve their creative thinking ability.

### CONCLUSION AND PEDAGOGICAL IMPLICATIONS

Based on the findings of the present study, it can be concluded that the use of visual materials or visual elements in teaching and learning has a positive result because visual treatment can help to improve the students learning in several ways. As we can see, the experimental group benefited more from vocabulary learning than the control group. It is concluded that learning by use of visual materials is more effective than learning without visual materials. The positive effect of using visual materials such as, pictures, flash cards, etc. became obvious after four weeks.

There are advantages which are related to this study. First when the students learn vocabulary items by use of synonyms, antonyms, and translation, perhaps they forget those words in the future. But when they learn the words by visual teaching, this way improves their learning, and it can also help better recall of the words. The second advantage is that when the students learn each word visually, they can easily remember words and make sentences more than the time they learn words verbally. Here, it can be claimed that receiving information verbally and visually can facilitate learning. Another advantage is that using pictures in teaching vocabulary will help teacher to have an interesting class, because students are interested in looking at the pictures and this way is enjoyable for them. Pictures are attractive for the students and also using pictures help teacher to overcome the problems of translation. As a result, it is recommended that teachers and learners use visual treatments for better teaching and learning. The most important point is that the retention and reminding of vocabularies will be better by the use of visual materials and fortunately both teachers and students agree with this matter.

Further, the present study shows the importance of images in teaching, and the findings proved the benefit of incorporating images both in teaching and learning. If the images are selected and used appropriately, they can increase and lead to a deep and useful approach for learning among students.

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