The Effect of Visual Instruction on New Vocabularies Learning

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Abstract

Learning of vocabulary is an important subject for the second or foreign language learning. So this study intends to focus on how to improve vocabulary learning by use of visual materials. The purpose of this article was different effects of visual materials such as pictures, real objects, flash cards on vocabulary learning for better retention and learning. So, 39 female intermediate students cooperated in this study. At first participants were divided into two groups, Experimental and Control group. During the 8 sessions of the treatment, 56 vocabularies were instructed to the participants. Experimental group were instructed the words visually, and control group were instructed the words traditionally. After instruction, two groups were tested (Post-test) the results were analysed by using SPSS statistical software. Data analysis showed mean, variance and standard deviation. The result of tests showed noticeable progress of experimental group. It was found that the learning and retention of words in experimental group was increased by use of visual materials, but control group did not and there was a meaningful difference between two groups. Finally, it is concluded that visual learning in experimental group was an effective way for all of students.

Keywords: Visual Instruction, Vocabularies, Pictures, Visual learning, Better Retention.

Introduction

What is visual instruction in new vocabulary learning?

The teaching of foreign language vocabularies is an important subject. And it is a good component for all language classes. So, all of language teachers should consider how to teach vocabulary. According Hatch & 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 important way for vocabulary learning. According Harmer (2001) visual things make the learning process easier. As a result; they are used by teachers for better learning. English teachers feel that the using of visual materials such as pictures, real objects, etc in teaching new words makes the learning process enjoyable and memorable. Teachers found that visual elements can attract students for better learning. According Harmer (2001) if teachers show and check the meaning of words, it can be an important and good way for use of pictures. The use of pictures is better and more useful than other materials .it is suggested that an effective use of visual things like pictures have a positive output and results in learning. (Nelson, 1976).

Its relationship with language learning and other concepts:

According Danan (1992), the language teachers use different visual materials so that they can increase student's interaction and motivation in classroom. The use of different types of visual materials can be helpful for teachers. Visual aids can provide useful and suitable solutions for problems of language teachers. If teachers use visual and verbal aids together, the students learning are better (Mayer & Sims, 1994). And also According to Carney (2002), visual elements increase Students learning because there are more concentration for them.
Its significance in language learning:

The result of this research will be useful for teachers. All of the teachers have concluded that there are benefits from the use of visual learning for learners with different ages. Likewise, Koren (1996) points out that the learning of foreign words with pictures can be easier and memorable than the words without pictures. Because of this matter, many teachers in the English language classrooms use from photo dictionaries to increase the vocabulary and speaking skills of the learners’. Visual elements such as pictures can be important and suitable solutions for many problems. There are many researches on learning vocabularies by pictures or example, Underwood (1989), as cited in Chun & Plass (1996) has concluded that an important rule for learning is visual memory. For learners, memorizing words by use of visual objects is more effective than memorizing them with only the text.

Statement of the Problem:

Vocabulary learning is an important matter for learning of foreign language. Most times it is not easy to remember some vocabularies. And because of this matter researchers investigated to increase student’s learning through visual elements. So, teachers and students had the same opinion with visual instruction. According French Allen (1983) if teachers use visual materials, students learning will be better than the time when they use other materials. And the writer researched this study to understand do pictures encourage students in teaching vocabularies or not?. And also according Nelson et al (1976) the use of visual materials such as pictures is effective way and it has good results.

In summary, the purpose of this study is that, it can help: Make a purpose for learners, Improve learning skills, Stimulate interest for second language learners, Provide an interesting way for learning, Make learners more proficient, Encourage learners for learning and Play a major role in knowledge development.

Literature Review

Based on Hornby’s definition (2004) 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. According Wileman (1993) 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 that for teachers to instruct vocabularies visually also and the students have to learn it. There is a good point that we can encourage students by use of pictures for a more useful learning. Benson (1997) has pointed out: we are not able to think without perception of pictures or images. This way is interesting for some language teachers and also students. Visual materials like pictures have an important role for improving knowledge and learning process.

According Nelson (1979) visual materials like pictures are very effective for memory. Because they are various and also Paivio’s dual coding theory (1986) is an interesting theory for some teachers because it contains many implications for learning process. According Mayer & Sims (1994) visual elements such as pictures or real objects are learned better than a lot of words because the use of pictures is easier and more effective. And also images are useful for learning process. As Armstrong (2001) if learners learn and memorize the vocabularies through visual materials, this way is more useful than the time when they learn vocabularies without perception of visual materials and through only text. Harmer (2001) real objects, some books, newspapers or magazines and etc make the learning process easier. As a result; they are used by teachers for better learning. Richards et al (1985) they defined this study like this: all of us are able to have this ability to remember most things after a short or long time. This ability is called retention. And also according Nelson et al (1977) we can remember pictures or images better than vocabularies. Potter & Faulconer (1975) investigated this study and they concluded that we can classified pictures better and faster than vocabularies. And also according Paivio (1986) we can store and remember pictures for a long time. According Benson (1981) there are some acknowledgement phenomena that point out: we can processed images in various kind. And also there are many researches that indicate we can read with our left brain hemisphere, while written information or visual things are learned in right hemisphere. The purpose of this study is that to find the effect of vocabularies teaching by use of visual materials on Iranian Intermediate EFL learners. This study attempted to investigate a hypothesis that visual materials can be effective on new vocabularies learning.

Methodology

Participants

In order to have enough number of participants, 39 female students between 16 to 20 years old agreed to cooperate with the researcher. Their proficiency in English was intermediate level. And their native language was Persian. Participants were divided into two groups: 1. Experimental group (N = 20) and 2. Control group (N = 19)

Instruments

Three types of instrument were administered in this study as follows:

Background and proficiency questionnaire:

The first test was background test which contained the information about participants age, gender, mother tongue and occupation. Then proficiency test for evaluating of the participants proficiency.
Pre-test/Post-test questionnaire
Before any instruction pre-test was used to find the homogeneity of the groups at the very beginning of the course. A questionnaire with 20 vocabulary questions of multiple-choice items, and finally the same test was used after instruction as (post-test) for collecting data. The time allotted was 30 minutes. All the students answered those questions. And the results of test provided data.

Treatment
Treatment was 8 sessions and each session was 45 minutes. Participants were divided into 2 groups. 1) Experimental group 2) Control group. During the 8 sessions of treatment, 56 vocabularies were instructed to the participants by instructor. It means that in each session, learners learned 7 vocabularies. Because, according to Grains (1986) "Retention in short-term memory is not effective if the number of chunks of information exceeds seven" (cited in Moras, 2001). This suggests that we should not teach more than this number to learners.

Materials for experimental study:
Oxford Photo Dictionary and some flash cards and real objects were selected for instruction and vocabularies teaching to the students. The Oxford Photo Dictionary is a special dictionary for learners of English of all ages from beginner to intermediate level. Over 2400 words (both British and American English) are presented in it with colour photographs. Topics cover the family, the human body and clothes, the home and the city, shops and food, the post office, money and the bank, school and work, science and the environment, travel, sport and animals.

Procedure and design
New vocabularies were instructed visually to experimental group (N = 20) procedure as follows:
1. The introduction of words: In this part, teacher introduced a word and also described and wrote it on the whiteboard, for example; different pictures and some real objects and flash cards were shown, and teacher repeated them three times, and then the students were asked to repeat them aloud for better learning.
2. Pointing and the group repetition: After teaching of all vocabularies, in this part, visual materials were shown and the students were asked to say their names aloud.
3. Individual repetition: In this part, teacher asked some students to say the new word individually.
4. Question from students: After all, teacher explained the words verbally or sometimes wrote a short description on the whiteboard and then asked students to say their names. Generally, the students both watched the pictures and learned their names, pronunciations and the writing of the new words, so teacher could improve their listening and reading skills because these activities can help to developing listening and reading skills 1) listen and repeat, 2) listen and match, 3) read and match.

Procedure for control group
Teacher taught new vocabularies verbally. For example; verbal explanation means that she explained the only meanings, synonyms and antonyms verbally and learners learned new vocabularies without watching their images. Finally, the researcher spent 45 minutes for each class in order to teach the new vocabularies to the students. After 4 weeks and 8 sessions instruction and vocabularies teaching, the students were tested, this test is called post-test. The number of questions were 20. And all of the students answered the questions. Then data was provided by results.

Data analysis
After answering the questions (both pre-test and post-test) by students the results of these questionnaires provided data. The data got from the questionnaires which were analysed by using SPSS statistical software. In this part researcher calculated the results of data. This included mean, standard deviation and variance in 3 tables for two groups that show the progress level of students by two different instructions.

Results
The related results for each group are reported in three tables:

<table>
<thead>
<tr>
<th>Table 1. Vocabulary scores in pre-test for experimental and control group.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
</tr>
<tr>
<td>pre-test</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>
Table 1 exhibits Mean, Standard Deviation and Standard Error Mean for two groups (Experimental and Control). Pre-test scores were analysed according SPSS statistical software for 39 students who were tested before any instruction, so the teacher could estimate prior knowledge of students. And also pre-test was used to see whether the students were at the same level of vocabulary knowledge or not. And there was not significant difference among them, and students had not high scores and their scores are not satisfactory.

Table 2. Vocabulary scores in post-test for experimental and control group.

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-test</td>
<td>1</td>
<td>19</td>
<td>13.95</td>
<td>1.508</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>20</td>
<td>19.40</td>
<td>0.754</td>
</tr>
</tbody>
</table>

Table 2 shows post test scores for Experimental and Control group: As we observe, the experimental group (N=20) had a noticeable progress because, they were instructed visually and learned new vocabularies by use of pictures, real objects, etc., so this way was effective way for vocabulary learning. The control group (N=19) had a lower scores toward experimental group, because they were instructed verbally, it means that teacher had just taught new vocabularies by the explanation of meaning, synonym and antonym without showing their pictures. As a result; they had lower progress toward experimental group.

Table 3. Mean difference between two groups.

<table>
<thead>
<tr>
<th>Levine's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>t</td>
<td>df</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>0.282</td>
<td>0.599</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-2.119</td>
<td>0.041</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>7.891</td>
<td>0.008</td>
</tr>
</tbody>
</table>

Table 3 exhibits mean difference between two groups and as we observe, there is a significant differences between two groups.

Discussion and Conclusion

The main purpose of this study was to know the effect of vocabulary learning by use of visual materials. The teaching of foreign language vocabularies is an important discussion for many teachers and researchers. For instance, Shana K. Carpenter and Kellie M. Olson (2011) 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. Teacher used different kinds of pictures in her lessons. So, both English teachers and students were believed that using pictures makes learning process more enjoyable and memorable. And also, Katerina Joklova (2009) examined using pictures in teaching vocabulary and pointed out: he gained a good insight into the matter, he got familiar with many interesting points of view and facts, and finally he was forced to reconsider and improve his own teaching practices. Moreover, Suzanne Stokes and Ibraheem Saeed Al-Jaafari investigated the effect of using pictures in teaching vocabulary. They felt that pictures attracted the students for better learning. And also, they 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 popular way of teaching and learning. As a result; pictures must be chosen carefully. And also pictures should be suitable both for the language to be taught and for the class's students. And also pictures need to be visible, especially if teacher want to show them to the whole class, they should be big enough for everyone to see. Generally, visual teaching is a beneficial way for vocabularies learning. In order to prove this subject, the students were instructed and tested. Their scores proved this subject. Generally, as we observe the findings, we can see that the students who were instructed visually, had more progress than the students who were instructed verbally after 8 session and 4 weeks. As a result; visual instruction is more beneficial than verbal instruction because this study was useful both for the researcher and for all of the students.

This 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. This study suggests that the use of visual materials or visual elements in teaching and learning has
positive results because visual treatments can help to improve the students learning in several ways. As we see, the experimental group benefited more from vocabularies 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 vocabularies by use of synonym, antonym, sentence and translation, perhaps they forget those words in future. But when they learn the words by visual teaching, this way improve the students learning. And the retention or recall of those words will be better. Second advantages is that, when the students learn each words visually, they can easily remember words and make sentences more than the time they learn words verbally. 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. Because both of them benefit from this way and the most important point is that the retention and reminding of vocabularies will be better by use of visual materials and fortunately both teachers and students agree with this matter.

References


