A Comparative Study of Textual and Visual Contextualization on Iranian EFL Learners' Vocabulary Learning

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Abstract – *Language teaching practitioners are currently putting increasing emphasis on L2 vocabulary learning in the language teaching curriculum. Additionally, with the emergence and prevalence of growing technologies, language teachers are assumed to take advantage of these technologies in prompting L2 learning vocabulary. The present comparative study investigates the effect of using two types of vocabulary contextualization; textual and visual, in teaching vocabulary. The participants were seventy learners in pre intermediate level of L2 proficiency ranging in age from 14 to 30. On the basis of a Cambridge Placement Test of Vocabulary, they were selected and divided into two groups of 35, namely group 1 and group 2. The lexical items were taught to group 1 and group 2 through showing videos and written texts respectively. Results of t-test showed that the learners who learned the vocabulary items through visual contextualization manifested more vocabulary acquisition than those who received vocabulary instruction through reading written texts. It can be concluded that visual contextualization can aid language learners more in vocabulary acquisition than textual contextualization.*

Key Words – *visual contextualization; textual contextualization; teaching vocabulary*

1   Introduction

Vocabulary is an important part of a language as well as the basis of communicating in L2 context. It is one element that links the four skills of speaking, listening, reading and writing all together. Teaching vocabulary is also one of the major challenges foreign language learners face during the process of learning a language. Even though, one way to ease the burden is to assist students in realizing the role and function of context during the process of L2 vocabulary learning. This could be achieved through presenting vocabulary items within specific contexts. This study aims at investigating the effect of contextualizing vocabulary items in the form of textual and visual contexts and compares their effectiveness.

It is believed that the enrichment of the context in which language learning takes place, whether first language acquisition or second language learning setting, may have great impact on learners' development of vocabulary. (Anderson & Nagy, 1991; Read, 2004). Vocabulary use, moreover, occurs not because the learner is trying to learn words but because the learner is trying to understand what is said or written.

Among many, there are two types of contexts which are more commonly used in language teaching; textual and visual. Textual contextualization refers to presenting vocabulary items in written texts and within sentences. It is the discoursal feature of text that allows readers to relate, trace, and link the different elements of texts together to reach to the core of statement; that is, meaning. On the other hand, visual contextualization is when the learners are exposed to language by directly observing people communicating and using language in real contexts. This can be also done through watching videos on screen. Since it is often impossible for language learners to travel to the countries where English is spoken, creating simulated situations in which learners can actually see how language is used is a valuable practice that assists language learning in general and vocabulary learning in specific. The present study aims at shedding light on the difference between teaching vocabulary items in the contexts of written texts and videos.

Nowadays, the pervasive use of multimedia and telecommunication system has made language learning more accessible. Thus, it can be claimed that words simultaneously presented in oral and visual forms are more likely to activate both coding systems i.e. spoken and written, than words only presented in written form. The dual-coding theory proposed by Paivio (1971) suggests that when pictures are added to the meaning, the number of signals connected with the message increases.
In an enriched context, the meanings of unknown words can be inferred from the context, therefore, it can be claimed that getting the meaning from the context is a stepwise process through which learners make use of semantic and syntactic clues provided by the context to arrive at the meaning of a word (Beck & McKeowen, 1991).

Most research on incidental vocabulary learning has focused on written texts. In addition to written texts, subtitled television programs seem to provide a rich context for incidental vocabulary acquisition (Grignon, Lavaur & Blanc, 2005; Zarei, 2009). Watching television has become a common way of receiving information from all over the world. Moreover, many of television programs from some countries are available in many other countries.

2   Statement of Problem

Vocabulary is central to language and is of great significance to language learners. Words are the building blocks of a language since they label objects, actions, and ideas without which people cannot convey the intended meaning. The prominent role of vocabulary knowledge in second or foreign language learning has been recently recognized by theorists and researchers in the field. Accordingly, numerous types of approaches, techniques, exercises and practice have been introduced into the field to teach vocabulary (Hatch & Brown, 1995).

However, it is the decontextualized vocabulary training which makes vocabulary learning dull and extremely difficult for learners. On the other hand, if language teaching practitioners utilize contextualized materials for teaching vocabulary, the lexical items will be maintained much longer in learners' minds than when presented in isolation. Learners' lexicon is continuously growing. Thus, Learners to acquire and retain new words have to take part in various meaningful learning activities such as guessing task, describing practice, and conversation making exercise. These activities create a contextualized vocabulary learning (e.g. through showing movies) which helps learners internalize and utilize various words in different settings. Thus, it seems necessary to investigate the effectiveness of these factors in improving learners' vocabulary knowledge.

In the context of Iran, language learners being aware of the significant role of vocabulary knowledge in language learning process, believe that their EFL teachers' method of vocabulary teaching including

defining, pronouncing, spelling and explaining new words' grammatical functions is not effective and they mostly learn vocabulary in a passive manner. Therefore, it is evident that presenting lists of unknown words with their L1 equivalents is not an efficient way to teach lexical items as it doesn't lead to any beneficial consequence.

In the pursuit of the purpose of the recent studies that is how to enhance learners' vocabulary knowledge aims at investigating the difference between textual and visual modalities for presenting new vocabulary. A vast majority of research studies carrying out in language learning realm, have been devoted to vocabulary learning, however, a few of them investigated the effect of verbal and visual modalities on vocabulary learning (e.g. Kost, Foss & Lenzini, 1999). To see how these aspects of contextualization influence learners' vocabulary learning, the present study compares learners' lexical growth with regard to their exposure to written and visual materials.

Laufer (2003) believes that learners encountering unknown words try to get the meaning using contextual clues (linguistic or non-linguistic). In line with this, many of reading experts have focused on the critical role of guessing strategies in learning lexical items.

Several research studies have worked on word learning strategies and their results suggest that these strategies including word part, context, and definition based strategies may have a great effect on learners' lexical growth. It has been shown that definition based strategies are more advantageous over the rest. But they still have their own deficiencies (Stahl & Nagy, 2006, p. 182):
1.   The meaning of a word is to some extent dependent on the context in which it occurs,
2.   Definitions do not impart information regarding how the words are used
3.   Children have trouble understanding the definitions.

3   Literature Review

In a review of general language assessment, Schoonen (2011) observed that hardly any research focuses on communicative language ability, or even on performance tasks such as understanding meaning through reading and listening. This awareness of the importance of investigating L2 knowledge in context is also growing in the field of vocabulary (Nation, 2007; Read, 2004).

Yanguas (2009) studied the effects of different types of multimedia glosses, namely textual, pictorial, and textual coupled with pictorial on text comprehension and L2 vocabulary learning. Ninety-four participants read a text under different conditions taking advantage of different glosses as they were asked to think aloud. Results of quantitative and qualitative analyses of the data demonstrated that all multimedia glosses participating groups outperformed the comparison group and the textual coupled with pictorial glossing group outperformed all the other participating groups.

There are some other researchers who believe that learning new words semantically related need more practice to be fully retained (Finkbeiner & Nicol, 2003). On the contrary, Pigda and Schmitt (2006) in their study showed that confusing vocabularies are not only semantically related but also structurally similar. This is true probably as it requires more time to differentiate these new words and to assign new labels for them in semantically related items (Nation, 2000).

On the importance of visual/ textual enhancement Sharwood Smith (1994, p.181) writes the following lines: "Whether the enhancement is subtle or very explicit, the learner's brain must still register it. What we know of learners includes the fact that they are very good at ignoring what appears to the

outside observer to be very obvious… This is why we need to do a great deal of research on the matter to see what works best."

White (1998) emphasizing the role of visual/ textual input believes that visual/ textual enhancement can help L2 learning through a) attracting learners' attention to certain L2 features, b) helping learners forget their false analyses of L2. Thus, visual/ textual enhancement appears to affect learners' knowledge and performance in the second language, and it seems reasonable to expect language teachers and syllabus designers to make use of visual/ textual enhancement.

Put it simply, visual/ textual enhancement assists learners in noticing certain linguistic forms in the input that may be forgotten or ignored (Sharwood Smith, 1991). It is believed that visual/ textual input enhancement help learners in "input-to-intake" process as it underlines linguistic forms which usually go unnoticed (Sharwood Smith; 1993). This claim is also in line with the current theorizing in SLA that "noticing" is essential to L2 acquisition (Schmidt, 1990, 1995). It is, therefore, natural that input enhancement should have gained considerable popularity in the field of SLA.

One comprehensive study on the role of contextual clues in test-takers' performance in vocabulary testing was conducted by Uckun (2008). The researcher describes the development and trial of three measurement techniques each providing different degrees of context; word-definition matching test, gap-filling test and cloze test. The first test provides no context; the second one provides a reduced context; and the last one provides the whole context. The aim of the study was to investigate whether increasing the amount of context surrounding the target words from no context to reduced and whole context produced differences in the performance of testees for the same set of vocabulary items in differing contextual conditions. One hundred eighty nine students from three language proficiency levels (elementary, intermediate and advanced levels) were given three types of tests at their own level of language proficiency in order to investigate how much context is needed for testees to be successful in vocabulary tests at different stages of linguistic ability. The researcher concluded that all subjects regardless of their language abilities benefited from the reduced context condition at sentence level. "The expectations of a greater success with the extended discoursal context at higher language ability levels were not supported by this study" (p. 21).

Moreover, Webb (2008) investigated the effect of context on inferring the meanings of target words in vocabulary tests. Fifty Japanese university students encountered 10 target words in 3 sets of 10 short contexts that were rated on the amount of information available to infer the meanings of target words. Then another vocabulary test measured recall of form, recognition of form, recall of meaning and recognition of meaning. Based on the results, the group that read the texts containing more contextual clues had significantly higher scores on both tests of meaning which indicated that the quality of context rather than the number of encounters may have greater effect on in inferring the meaning of unknown words and gaining knowledge of meaning.

Jiang (2000) states that contextual clues may have great effect on the process and outcome of word inference. In line with this, Soria (2001) reveals that cue-adequacy provides more opportunities for learners to make accurate word meaning inferences. But the question is how many of such easily guessed vocabularies can be remembered after a time interval. If it is true that enriched contexts can facilitate word learning process, thus the reading materials especially designed for learning vocabulary should be clear and supportive. Simply, contextual clues should aid learners not to make wrong inferences. On the other hand, if the reverse is proved, a normal reading in a variety of context types, especially the ones from which guessing the word meaning is more difficult, might slow down reading but accelerate vocabulary retention.

Keyvanfar and Arya (2009) studied the probable impact of three levels of context pregnancy on the abilities of three groups of Iranian EFL learners to recognize and produce a set of low frequency target words. For this purpose, 101 learners were selected to participate in this study. At the beginning of the instruction, all the learners were taught how to use "contextual clues" to guess the meaning of unfamiliar words through a leaflet. Then, the control group received the target words' definitions out of context, while the first and the second experimental groups encountered the target words in "directive contexts" and "general contexts" respectively. With the administration of posttests, it was revealed that there was no significant difference among the three groups in their "productive" vocabulary knowledge whereas the "directive context" group and the control group both outperformed the "general context" group by their "receptive vocabulary" knowledge. It was concluded that the employment of directive contexts which are rich in contextual clues and exposing the students to the dictionary meaning of unknown words have a significant impact only on the students' receptive vocabulary knowledge.

No one can deny learners' excitement and enjoyment watching instructional movies in the classroom (Mishan, 2005). Research shows that films or movies directly engage learners' feelings and also stick in minds of the learners as they entertain them. Thus it can be concluded that utilizing films and other visual media may have a great impact on L2 learning process.

One study conducted by Sadeghi and Farzizadeh (2013) the vocabulary learning gains of beginner EFL learners using the application of visual aids and the traditional technique of definition was investigated. The proposed hypothesis predicted no significant difference between the two methods. The participants were chosen using an intact group design sampling procedure. The experimental group was taught using visual aids and the control group, using traditional definition. The analysis of data using independent t-test indicated the experimental group outperformed significantly better than the control group in the post-test. The results offer a wealth of opportunity for teachers to experience the visual-supported approach to teaching vocabulary.

Arkan and Taraf (2010) made an attempt to examine the effectiveness of authentic animated cartoons in teaching English to young Turkish learners. The study, assuming a pre-test and posttest design, compared the instruction effects based essentially on traditional grammar and vocabulary teaching and the one on authentic animated cartoons pursuing the same purpose. The control group followed a traditional grammar-based syllabus for four weeks, while the experimental featured The Simpsons as classroom material. Results pointed out to the experimental group's outperformance in learning target grammar points and vocabulary items.

The meaning of a word depends on the context in which it is used. Stahl and Nagy (2006) highlighted the role of implicit and contextualized learning. In addition, there are so many words which have multiple meanings regarding different contexts. Therefore, presenting words out of context and working on them separately is merely time consuming and futile. That is why dictionaries try to tackle this problem by listing multiple meanings for words, but in most cases, they do not provide the context. Therefore giving a definition for a word is useful if we use the word in context and if we know how the word is used in a specific situation

Chapple and Carties (2002) in their study investigating learners' responses to films revealed that films are among the most effective instructional materials to be utilized in contextualized learning approaches in EFLclassrooms in Asia (Zhang, Wu, Wei, & Wang, 2011). They considered films as pedagogically valuable material to be used in EFL classrooms due to providing a rich source of context and vocabulary for the EFL learners. Reese and Davie (1987) report studies which suggest that visual illustrations are most effective when they are accompanied by the script.

In a research done by Anjomafrouzi and Tajalli (2012) the effects of using mnemonic associations on vocabulary recall of Iranian EFL learners were investigated in two separate experiments with adolescents and adults. In each experiment, the students were divided into two groups of experimental (mnemonic) and control (rote). Using a number of predesigned associations as models, the students of the mnemonic groups were trained to generate mnemonic associations of their own for the new vocabulary words they had chosen to learn. Then, their use of the initial and the new self-designed associations was assessed by giving four recall tasks. The students of the rote groups, on the other hand, were instructed to learn the words through memorization and repetition. The data analyzed revealed that using mnemonic associations led to significantly better performance of the adult students when comparison was made with an external control group and better performance of both adult and adolescent groups when comparison was made with an internal control group.

The current study adds to the previous ones in that apart from the mentioned contextual levels in presenting vocabulary items, there is visual contextualization which can increase the probability of lexical acquisition among language learners.

3.1   Research Question

Based on what have been expressed so far, the following question is raised:
Do participants who receive vocabulary instruction through textual contextualization learn differently from those who receive vocabulary instruction through visual contextualization?

3.2   Null Hypothesis

There is no difference in vocabulary learning between the participants who receive vocabulary instruction through textual contextualization and those who receive vocabulary instruction through visual contextualization.

3.3   Methodology Participants

In order to achieve the result of the present research, 72 language learners, from among 84 who took part in the first phase, were selected for the final phase of the study. They were both male and female, ranging in age from 14 to 30 and were studying in the pre-intermediate level of English language in Arman English Institute in Khodabandeh and Islamic Azad University, Khodabandeh, Zajan, Iran. After administrating the pre-test, they were divided into two experimental groups who received vocabulary instruction in two forms of textual and visually assisted contextualization.

4   Instrumentation

In order to conduct this study, the following instruments were used: Firstly, The vocabulary part of a Cambridge placement test was administered to participants as a pre-test to see if the participants were homogeneous enough to start the study. From among 84 participants who took part in the first phase of study, only 72 of them proved to be homogeneous in terms of vocabulary knowledge. Then, they were dived into two experimental groups, each receiving a different treatment. Group 1 received vocabulary instruction in the following way: 10 episodes of "HOW DO YOU DO" in the intermediate level were

carefully watched. From all the episodes, 80 vocabulary items were selected to be worked on in this experiment. Since the function of the showing the videos was just to visually contextualize the intended words, prior to showing the movies to the participants in each session, only the definition and meaning of the vocabulary items which were to be watched in that session were clarified for the participants. After that, the video was played and the participants witnessed how each word, whose meaning they had just learned, was used in the context a real communication.

The selected 80 vocabulary items were also presented to the second group the same as Group 1. Prior to providing the participants with the contextualized text, the definition and meaning of the intended vocabulary items, which were to be worked on in that session, were clarified for the participants. Then each specific word was presented to the participants in the context of one sample sentence in which the word was used (just as what is done in dictionary examples). This practice, like what happened to the first group, allowed participants to see how the words are used in context, not to mention, only textually.

The whole project of teaching vocabulary items took 10 sessions of instruction. Having finished the treatment of the study, it was time to measure to what extent the two groups were successful in learning the intended vocabulary items. Therefore, the next instrument, which was another vocabulary test designed by the researcher was utilized. This written multiple choice vocabulary test, which included all the 80 intended words and functioned as the post-test, was administered to both groups in order to observe how differently the two groups performed in it.

5   Results and Discussion

To delve into the purposes of the study certain statistical procedures were utilized to analyze and interpret the data elicited by the study. The main statistical procedure employed in this study was t-test in order to compare the means of the two experimental groups of the study to determine whether their performance on the post test was considerably different. The first step in the statistical procedures of the research pertained to the selection of a homogeneous group. Therefore, a population of 72 participants with scores one standard deviation above and below the mean with the following descriptive information (Table 1) was selected.

Table 1:   Descriptive Analysis of the Pretest

	N	Mean	Std. Dev.
Group 1	36	16.66	3.52
Group 2	36	17.44	4.19

In order to determine if the difference between the means of the scores of the two groups were significant on the pre-test, an independent t-test was conducted between the scores of the participants in both groups. The observed t-valve of the df= 70 was 0.85, which is a smaller than the critical t-value that equals 2.00 at the same degree of freedom (df= 70). Therefore, it can be concluded that the difference between the means of the pre-test scores in the two groups was not significant, i.e. the two groups performed fairly similar to each other in the pre-test. The result of the independent t-test for the pre-test scores is shown in Table 2.

Table 2: Independent Sample t-test for Pre-test Scores

	t-test for Equality of Means		
Group 1 & Group 2	t	df	Sig. (2-tailed)
	0.85	70	0.39

In order to find out whether the performance of the two groups on the post test was considerably different, a post –test, which was a vocabulary test containing all the 80 lexical items worked on in the experiment, was utilized. The descriptive analysis of the post-test is presented in Table 3.

Table 3: Descriptive Analysis of the Post-test

	N	Mean	Std. Dev.
Group 1	36	12.69	3.87
Group 2	36	10.69	2.84

After administering the post-test to both groups, an independent t-test between the scores of the participants in the two experimental groups was conducted to determine the significance of the mean difference between the scores of the two groups. As shown in the Table 4 below, the observed t-value for the post-test was 2.49 (df=70), which is greater than 2, i.e. the critical t-value at the same degree of freedom (2.49>2; df=70).

Table 4: Independent Sample t-test for Post-test Scores

	t-test for Equality of Means		
Group 1 & Group 2	t	df	Sig. (2-tailed)
	2.49	70	0.015

From the t-test table, it is quite obvious that the effect of using videos in contextualizing the vocabulary items has been significant since the t-observed value is greater than the set value of t critical. Therefore, as a result of the above-mentioned analyses reveal, the hypothesis formulated in this study can be rejected with caution. In other words, it is concluded that using videos in contextualizing the vocabulary items improves vocabulary learning of Iranian EFL learners more than using textually contextualized materials.

The main purpose of the present research was to firstly highlight the importance of contextualizing words when attempting to teach vocabulary, and secondly, make a comparison between

contextualizing words within written sentences versus using video in which the actors use those words in the context of the movie.

Based on the results of the research, it can be claimed that presenting vocabulary in visual context and through movies is more effective than presenting them in written mode and mere examples. When learners actually see native speakers communicating in a real situation, they have the opportunity to use both their mental power in which their lexical schemata resides, and visual sense through which much of our world experience is supplied. In other words, when language learners are engaged in the job of vocabulary learning, if both their mental power and visual sense is activated at the same time, they will take more advantage in lexical acquisition

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