The Effect of Captioned Brief News on Iranian Secondary Students' Vocabulary Learning

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Abstract—This study investigated the effect of captioned news on vocabulary learning. Forty five secondary Iranian male students aged between 12 and 14 participated in this study. Students were exposed to eighteen captioned brief news during the course. Through a pretest-posttest design, it was investigated whether bimodal presentation of English vocabulary results in better learning. Furthermore, the differences between learning vocabulary through captioned news with that of non-captioned was investigated through hypothesis testing. The participants were divided into three groups; Group A was designed as a control group; group B were exposed to non-captioned news and group C to captioned-ones. All the participants completed two vocabulary tests before and after the treatment. One Way of Analysis of Variances suggested that bimodal presentation of vocabularies resulted in better vocabulary learning. Moreover, it showed that learning vocabulary through captioned news was more effective than with that of non-captioned ones. The result of the study shows that teachers and research can consider captioned brief news as an important material for vocabulary learning.

Keywords: vocabulary learning, TV brief news, English captions, secondary students

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1 INTRODUCTION

Learning vocabulary plays an important role in learning of a foreign language. It is one element that links the four skills of speaking, listening, reading and writing all together. In order to communicate well in a foreign language, students should acquire adequate words and should know how to select and perform them accurately. Word knowledge makes a learner to deeper and better understanding meaning of a concept. Word knowledge is an essential component of communicative competence and it is important for both production and comprehension in a foreign language. Reese [1] stressed the importance of vocabulary learning in second language acquisition. Unlike native speakers, second language learners (L2) go through a more conscious and demanding process of acquisition of vocabulary. They experience lexical gaps, the words they read which they simply do not understand or concepts that they cannot express as adequately as they could in their first language (L1). Sokoli, Stravoli [2] believes vocabulary learning believes vocabulary learning believes vocabulary learning believes vocabulary learning to be a vital part of each student's life.

One of the ways to develop vocabulary knowledge of L2 learners is through multimedia. Paivio [3] believed that there are two ways a person could expand on learned material: verbal associations and visual imagery. Dual-coding theory postulates that both visual and verbal information is used to represent information [4].Visual and verbal information are processed differently and along distinct channels in the human mind, creating separate representations for information processed in each channel. The mental codes corresponding these representations are used to organize incoming information that can be acted upon, stored, and retrieved for subsequent use. Both visual and verbal codes can be used when recalling information [5]. There is strong evidence, which proved that multimedia like videos can facilitate language learning, especially when the materials are captioned [6] [7]. Garza [8] suggests that Captioning may be a bonus because it helps language learners connect auditory to visual input which according to Doughty [9] may aid form-meaning mapping.

Abundant studies prove that captioned video facilitates vocabulary development. A study by Snyder and Colon [10] investigated the influence of both audio and visual aids on facilitating second language acquisition. It was found that the group provided with additional audio-visual aids performed significantly better in vocabulary retention. In support of the positive perception toward using L2 captions, Bean and Wilson [11] reported that their adult non-native-speaking students who viewed L2 subtitled materials showed significant improvement in vocabulary acquisition, and word recognition. Garza [8] found that caption increased the level of learning vocabulary in EFL learners. In another study by Neuman and Koskinen [12], it is found that caption video had

the better effect in vocabulary recognition and acquisition activities.Neuman and Koskinen [12] state that captioned video with sound provide a semantically enriched context where the visual and the audio lend meaning to the printed words on the screen. Their study compares learning vocabulary through watching television, through reading and listening to a document, and through listening alone. Their results indicated that words were learned and retained best from watching television. Chun and Plass [13] emphasize that associating lexical items with different types of media fosters richness of recall cues and increases the likelihood of retention. The rationale is that because words are coded dually in two modes, they are learned better than those coded only in one mode. Dual coding provides more paths for retrieval, and as such, helps learners build two types of recall cues in memory. Baltova [14] suggests that captions have positive effects on content and vocabulary learning.Winke, Gass & Sydorenko [15] believe that:

"Captioned videos for foreign language learning are becoming more common because they are more accessible, easy to produce, and fit well into online course offerings. They are viewed as an important pedagogical tool because they bring more native voices into the learning environment and help learners integrate written and aural information, which supports language acquisition."

In this study, a new area of the effect of captions on language learning is investigated by regarding the effect of concise news captions on vocabulary learning. This study attempts to investigate the effect of captions on learning vocabulary by regarding brief news. For this purpose, the following were proposed:

Q1: Does bimodal presentation of vocabularies have any effect on learning English vocabulary?

Q2: Are there any significant differences between learning vocabulary through captioned news and that of non-captioned ones?

2 Method
2.1 Participants

Forty five secondary Iranian male students aged between 12 and 14 participated in this study. Students were assigned to the same class according to their English in the entry tests. The accessibility to the teacher was the reason for the selection of participants.

2.2 Instruments

In this study, the researcher provided a background questionnaire; eighteen video clips of TV brief news, one pre-test and one post-test and a questionnaire for estimating students' attitude in learning vocabulary through captioned brief news.

2.3 Background questionnaire

This researcher developed questionnaire was used to induce demographic, educational and academic background of the participants. The items used for this purpose were age of the participants, their experience of language learning, total hours of English study per week outside of classroom, and extra English class.

2.4 Video clips of TV brief news

Videos for this study were prepared from eighteen short English brief news clips according to Iranian Press TV media.

2.5 Vocabulary tests

Forty items vocabulary test were used before and after the viewing session. Each test had the same key target language vocabulary words from the video clips. The selected vocabularies consist of noun, verb and adjective. Most of the words were spoken more than once in the videos. In the pre-test, the participants were asked to write the definition of the words in either Persian or English. The post-test consists of the same target words as in the pre-test.

3 Procedures

The participants were divided into three groups; each group consists of fifteen students, group A, group B and group C. Group A was designed as a control group and the other two groups were specified as two experimental groups. Group B exposed to non-captioned news and group C to captioned-one. All groups were given the same pre-test and post-test on the target vocabulary, but the format was different. Eighteen brief TV news clips were selected from the archive. All the news clips were shown with English captions. While showing the clips to Group B, the researcher blocked the subtitles. A list of 40 target vocabulary items was selected beforehand. Each clip was shown only once to each group. Participants were asked to write the definitions of the target words in the pre-test. The reason to adopt this approach but not others like matching or multiple-choice question is to make sure students really know the meanings themselves but not out of luck. The learning effect of each experimental group was compared in terms of their mean scores.

4 Findings
4.1 Descriptive Statistics

Table (1) presents the results of descriptive analysis for three groups of the study, i.e. Group A (control group), Group B (experimental group 1), and Group C (experimental group 2).As indicated in the previous chapters the Group B was exposed to non-caption news the Group C to captioned news.

Table 1: Descriptive statistics of the 3 groups in pre-test and post-test

		Mean	Std. Deviation
Pretest	Group A	4.27	1.033
	Group B	4.07	1.207
	Group C	3.94	1.124
	Total	4.09	1.104
Posttest	Group A	19.33	3.478
	Group B	27.43	2.377
	Group C	34.50	1.789
	Total	27.24	6.863

4.2 The Summary of Pre-Test Results

Table (2) summaries the mean of scores among the three groups in two conducted tests.

Table 2: Pre-Test Summary

Group	N	Subset for alpha = 0.05
		1
Group C	15	3.94
Group B	15	4.07
Group A	15	4.27
Sig.		.703

Means for groups in homogeneous subsets are displayed.

As table (2) and figure (1) show, it seems that the students in Group A (control group) performed better than the other groups. However, according to table 2, the results are not significant at the level of .05. No straightforward interpretation, therefore, for the pre-test results can be suggested.

4.3 The Summary of post-test results

Table 3 and shows the mean of the performance on post-test for each group.

Table 3: Posttest summary

Group	N	Subset for alpha = 0.05		
		1	2	3
Group A	15	19.33		
Group B	15		27.43	
Group C	15			34.50
Sig.		1.000	1.000	1.00

Means for groups in homogeneous subsets are displayed.

This table shows that the Group C (captioned news) achieved the highest mean score (34.5) at the post-test following by Group B (non-captioned news) and Group A (control group). One-way ANOVA

One-Way Analysis of Variances (ANOVAs) was used to compare the group means. To investigate the equality of mean variance between pre-test and post-test we made use of Levene's test. Since the results of Levene's test reported in table (4) at the alpha level .05 were significant, it is suggested that the variances of means among groups be equal.

Table 4: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Pretest	.125	2	42	.883
Posttest	3.508	2	42	.039

Research Question 1:

Does bimodal presentation of vocabularies have any effect on learning English vocabulary?

To investigate the first research question, we analyzed the result ANOVA tests. As the table (5) shows all the results for post-test were significant. Therefore, it is reasonable, in this stage, to interpret the results according to the level of significance.

Table 5: ANOVA Test

		Sum of Squares	Df	Mean Square	F	Sig.
Pretest	Between Groups	.845	2	.423	.336	.716
	Within Groups	52.799	42	1.257		
	Total	53.644	44			
Posttest	Between Groups	1781.549	2	890.775	128.671	.000
	Within Groups	290.762	42	6.923		
	Total	2072.311	44			

The F value in the table of ANOA for the post tests was significant (F=128.671, p≤.05). This suggests that the fist null hypothesis be rejected. In other words, it suggests that bimodal presentation of vocabularies affect learning English vocabulary. Since the means of scores in all of the three groups increased from pre-test to post-tests, we can suggest that this effect was positive, i.e. it helped learning English vocabularies.

Research Question 2:

Are there any significant differences between learning

vocabulary through captioned news and that of non-captioned ones?

Table 6 shows the results of multiple comparisons between two experimental groups and one control group.

Table 6: Multiple mean comparisons among groups

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
Pretest	Group A	Group B	.195	.417	.886
		Group C	.329	.403	.695
	Group B	Group A	-.195	.417	.886
		Group C	.134	.410	.943
	Group C	Group A	-.329	.403	.695
		Group B	-.134	.410	.943
Posttest	Group A	Group B	-8.095*	.978	.000
		Group C	-15.167*	.946	.000
	Group B	Group A	8.095*	.978	.000
		Group C	**-7.071***	.963	.000
	Group C	Group A	15.167*	.946	.000
		Group B	7.071*	.963	.000

*. The mean difference is significant at the 0.05 level.

As the table (6) suggests all the results for the post-tests at p ≤5 were significant.Multiple comparison between Group B (non-captioned news group), and Group C (captioned news group) suggests that there are significant differences between these two groups. The second null hypothesis, therefore, is rejected and the alternative hypothesis, which implies thatthere are significant differences between learning vocabulary through captioned news and that of non-captioned ones, is accepted. The mean differences (I-J) between the Group B and Group C suggests that Group C (captioned news group) performed better than the Group B (non-captioned news) group. Consequently, this means that learning vocabulary through captioned news was more effective than with that of non-captioned ones.

5 Discussions

Captioned video has been increasingly used in foreign language classes. The availability and accessibility of authentic videos (e.g. Via DVD, the Internet, Satellites) and captioned making software, makes it easy for teachers and curriculum developers to use captioned videos (including captioned news) in their foreign language teaching programs. Due to the widespread use of captioned video, this study indented to investigate L2 learner's use of captions while watching news in English as a foreign language. The findings suggested that bimodal presentation of vocabularies improve learning English vocabulary. In other words, learning vocabulary through captioned news was more effective than with that of

non-captioned ones. Overall, the results confirmed the results of previous studies in the related literature (e.g. Borras& Lafayette, [16]; Bird & Williams, [17]; Danan, [18]; Garza, [8]; Markham & Peter, [19]; Winke, Gass, and Sydorenko; [15]), which suggested that audiovisual materials enhanced with captions are powerful pedagogical tools, which are believed to improve L2 learning. The results of this study are mostly consistent with Birds and Williams [17] investigation, which concluded that bimodal presentation aids novel word learning. A reason for this effectiveness, as Garza [8] mentions, is that captioning helps language learners connect auditory to visual input.

The current study, furthermore, showed that learning vocabulary through caption among intermediate students is beneficial. This implies that participants were not distracted from the audio input by caption. The findings of past researchers in this regard are mixed. Markham [20] found that captions are more beneficial to advanced learners. Guillory [21] found that captions are powerful for beginning level learners. Taylor [22] found that captions are more of a distraction than a help for lower-level learners.

6 Conclusion

The main aim of this study was to examine the effects of using brief news on Iranian secondary students. Specifically, it investigates how English language material with or without English language, captions affected vocabulary development of the foreign language learners. Generally, the findings suggested that captioned news was effective in learners' vocabulary development. This supports Dual-Coding Theory, which postulated that bimodal presentation of L2 materials can facilitate learning. This study had some limitations. Considering vast areas of vocabulary learning, the researcher restricted himself to the brief news. Moreover, the important role of gender couldn't be investigated since all participants were male students. As Shehadeh's [22] mentions male and female are inclined into different learning activities, therefore, the generalizability of the results is not applicable to all of EFL learners. Although this research was on a very limited scale and with limited capacity of Generalization, this research helps us to have a deeper understanding of the effectiveness of captioned news on vocabulary knowledge.

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