

## ***THE INFLUENCE OF L2 VOCABULARY LEARNING ON DIGITAL FORMATS***

**Nigamananda Das**

**PhD Research Scholar, Venkateshwara Open University, Noida, Uttar Pradesh-201301, [arieshsarah@gmail.com](mailto:arieshsarah@gmail.com)**

**Dr. Shivani Vashisth**

**Associate Professor, Manav Rachna international institute & studies Faridabad, [shivani.fmech@miru.edu.in](mailto:shivani.fmech@miru.edu.in)**

### **ABSTRACT**

The study attempted to explore the effect on L2 vocabulary understanding and production of various multimedia modes. To this purpose, 52 students at the B.A. level were recruited who studied English and English in three groups. The participants were homogenised using a general competency exam. A video, audio and subtitles (VAC) were shown in the first group, the second group with video and subtitles (VC), and in the third group the video and audio were delivered in each group with different combinations of multimedia (VA). The students obtained a vocabulary understanding and post-test production at the end of the experimental period. In order to examine the given data, two independent one-way ANOVA methods were applied. The results showed no significant difference between the impacts on L2 vocabulary understanding and output of various multimedia combinations. The results of the current study can affect L2 students and teachers.

**Key words:** audio, descriptions, digital media, video, L2 vocabulary training

### **1.Introduction**

Input in second language learning is obviously very important. This means that the modality of input in the language acquisition has to be paid more attention [1]. Many academics have taken into account the effects on second language learning using multimedia material in recent years. With

multimedia sources becoming increasingly popular with younger generation, the effect of diverse multimedia aspects on language learning and proficiency can hardly be denied [2] This idea is confirmed by the favourable effect of the use of various types of multimedia for language learning by a number of scientists; under wrought films can help L2 learners to recall vocabulary in the second language by mixing visuals, spoken words and text. There are, however, those who oppose the use of multimedia in second language acquisition because they think that multimedia can be accompanied by a number of problems. The employment of L2 language classroom captioned films isn't effective since they can overload the visual-illuminate channel by simultaneously displaying animations, spoken information and text on a screen[3].

The study aims to address the following questions from the research in simple terms:

Does the impact of different multimedia modes on the L2 understanding of vocabulary have substantial differences?

Does the impact of various multimedia modes on the generation of L2 vocabulary differ significantly?

Digital media is a blend of paper, audio and imagery that makes input easier to understand[4].

## **2. Methodology**

### **Participants**

The workshop was attended by 52 B.A students, who were studying in English and English translation. There was an age of 18 to 30 participants. Three treatment conditions were separated into participants. The first group consisted of the 18 participants in video, audio and subtitles. The second group was video and subtitles (VC), and the third groups were 17 participants each. video and audio (VA).

### **Materials and technology**

The tools used in this study for the materials and data gathering included:

A common language competence exam was necessary in order to homogenise individuals in terms of vocabulary knowledge. Therefore, a Michigan Test multi-choice vocabulary test was utilised to determine the level of competence of the students. There were 40 elements of vocabulary. *Struggles of People's lives* was the name of a documentary film played in three separate sessions for pupils. The film lasted 48 minutes in total. The duration of the film was therefore nearly 16 minutes in each session. There was also an administered pre-test vocabulary of 103 terms. From the words that appear in the movie contents, all words contained in the pre-test were selected. Persian equivalent of the highlighted words had to be written in each sentence by participants. This test was aimed at removing words common to students from the post-tests. At the end of the trial period, 60 items in two halves were presented for the post-test. The test was done separately. The first section consisted of a multi-choice style comprising 30 elements of vocabulary understanding. The second half consisted of 30 articles of 'fill in blanks' type vocabulary production.[5]

## **Procedures**

Three experimental groups were separated into participants. VAC was the first organisation to receive audio and subtitles for video. During three sessions the participants saw the video. They saw the film at 17:10 in the first session. The second session saw another sixteen minutes and the remainder of the film was presented in the third session. The pupils were to write the summary of the film 10 minutes after watching the film each session. The aim of the event was to ensure students were careful about the film. VA was the second group. Without any subtitles, this group saw the film. But all other methods were identical to the first group. VC was the third. The same method as the previous two groups proceeded through this group, however they did not receive audio. [6]

The post-test was presented to students in a separate session at the end of the experiment, consisting of 60 questions. Two portions were included. Part A measure vocabulary understanding; it featured

30 multi-choice questions in which one of the four possibilities was required for every sentence. Part B comprised 30 manufacturing products for vocabulary. This section was in "full-in-the-blanks" format in which phrases with a blank phrase were supplied to pick up the blanks. The Persian equivalents of the target words were presented in parentheses before each phrase in order not to allow the participants to fill the blanks in language other than the target words. Furthermore the first letters were shown in blanks for the target words.[7]

## **Results and Data Analysis**

“Two independent one-way ANOVA techniques were used to examine the collected data. One ANOVA was used to examine the influence of different multimedia on the interpretation of L2 and another ANOVA was used to examine the effects of several digital media on the generation of L2 vocabulary.”

### **Investigation of the first research question**

The primary question of research was to explore the effects on L2 vocabulary understanding of various multimedia modes. A one-way ANOVA approach has been employed to answer this question. Table 1 contains descriptive statistics.

Group	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
VAC	18	10.5000	5.02055	1.18335	8.0033	12.9967
VC	17	14.1765	4.01926	.97481	12.1100	16.2430
VA	17	13.8235	5.87617	1.42518	10.8023	16.8448
Total	52	12.7885	5.21061	.72258	11.3378	14.2391

Table 1: Descriptive ANOVA vocabulary understanding analytics [8]

The VC group has the highest mean ( $X = 14.17$ ), which can be noted closely followed by the VA group ( $X = 13.82$ ), according to the results of Table 1. The lowest mean of the VAC group ( $X = 10.50$ ). The implication is that VC and VA conditions on the L2 vocabulary are more effective than

VAC. To verify if statistically significant are the differences found between groups, the one-way ANOVA procedure has been performed. Table 2 shows the outcome of the ANOVA procedure.[7]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	145.232	2	72.616	2.87	.066
Within Groups	1239.441	49	25.295		
Total	1384.673	51			

Table 2: ANOVA on vocabulary comprehension[8]

The observed F value ( $F_{(2,49)} = 2.87$ ,  $P > .05$ ) showed that statistically no significant discrepancies exist between the three groups on the basis of Table 2. Thus, although the VC and VA groups fared better than the VAC group on the VOC test, differences between these three groups did not have statistically significant effects.

## Discussion

The findings of this investigation showed that among the three experimental groups there were no significant differences. This means that these three conditions of stimulation have no difference in the understanding and production of the L2 vocabulary of the learner. While a significant trend was to have a higher comprehension of the language than that of the VAC group by the VC and the VA group, which in terms of vocabulary production was higher than by the other two, the differences were not significant statistically. A variety of research, some of which are discussed in section 2, vary in their outcomes. More words have been learned by VAC group than by VA. The results of these groups (VC and VC) in the written reconnaissance of word forms were higher than those of the VA study, although the group VA was better than those of the two above-mentioned groups in the aural identification of words.

## Conclusion

However the difference in effect of different multimedia glosses, including textual, visual or textual images, was not statistically significant, although there were substantive differences between the three experimental groups and the control group. According to the results of this study, there were not statistically significant effects of several input modalities, including visual, textual and pictorial conditions. The results of this study likewise support those who have evaluated, but found no significant differences between, the impact of different types of subtitles in multimedia education on vocabulary training. The results of this study may affect teachers, students and developers of products. The use of educational filming and making second language lessons more attractive to L2 teachers can increase the understanding and output of language for L2 students.

#### Reference

- [1] T. Sydorenko, "Modality of input and vocabulary acquisition," *Lang. Learn. Technol.*, vol. 14, no. 2, pp. 50–73, 2010.
- [2] L. Wang, Y. Qian, M. Scott, G. Chen, and F. Soong, "Computer-assisted audiovisual language learning," *Computer (Long. Beach. Calif.)*, vol. 45, no. 6, pp. 38–47, 2012.
- [3] S. Wang and C. Vásquez, "Web 2. 0 and Second Language Learning: What Does the Research Tell Us?," *CALICO J.*, vol. 29, no. 3, pp. 412–430, 2012.
- [4] R. Moreno and R. Mayer, "Interactive multimodal learning environments," *Educ. Psychol. Rev.*, vol. 19, no. 3, pp. 309–326, 2007.
- [5] A. A. Zarei and Z. Rashvand, "The effect of interlingual and intralingual, verbatim and nonverbatim subtitles on L2 vocabulary comprehension and production," *J. Lang. Teach. Res.*, vol. 2, no. 3, p. 618, 2011.
- [6] A. A. Rezaee and N. S. Shoar, "Investigating the Effect of Using Multiple Sensory Modes of Glossing Vocabulary Items in a Reading Text with Multimedia Annotations.," *English Lang. Teach.*, vol. 4, no. 2, pp. 25–34, 2011.
- [7] D. Kim and D. A. Gilman, "Effects of text, audio, and graphic aids in multimedia instruction for vocabulary learning," *J. Educ. Technol. Soc.*, vol. 11, no. 3, pp. 114–126, 2008.
- [8] M. A. Sadeghi and A. Farhadi, *Recognition using visual phrases*. IEEE, 2011.