



The Impact of Using Educational Videos on EFL Learners' Vocabulary Learning

Mahsa Taati Jelisch

Department of English Language Translation, Lahijan Branch, Islamic Azad University, Lahijan, Iran

Abbas Pourhosein Gilakjani*

Department of English Language Translation, Lahijan Branch, Islamic Azad University, Lahijan, Iran

Introduction

Vocabulary is vital in learning a second and foreign language because it plays a significant role in learning English and is the fundamental element of language skills (Ismail et al., 2017; Kurniawan, 2009; Namaziandost et al., 2022). Learning vocabulary is very significant for communication because without words, communication stops. Learning an adequate number of words has become an obstacle for some learners due to several factors including inability to learn, lack of exposure to English, lack of self-confidence, and lack of knowledge of precise vocabulary strategies (Barani et al., 2010).

Most English teachers in Iran are non-native and students do not have the opportunity to practice new language in public (Isazadeh et al., 2016). Furthermore, lack of access to authentic materials such as instructional videos has made English as a Foreign Language (EFL) learners unfamiliar with important word elements like pronunciation or parts of speech (Isazadeh et al., 2016). In Iran, vocabulary is taught by giving Persian equivalents, but new methods are not practiced, and one of the problems for learners is that they do not learn words and always forget them easily (Barani et al., 2010).

Providing information through multimedia (visual and spoken text, graphics, and videos) have many benefits for language learning (Kim & Gilman, 2008). With the arrival of technology, a possible way to improve the vocabulary of EFL learners is through audio-visual materials such as instructional videos (Isazadeh et al., 2016). Even if some studies have worked on the impact of video materials on language skills and sub-skills in the world, the study of Iranian EFL is limited. In addition, using traditional teaching methods in Iran, learners must memorize a list of words or bring up equivalent words. The problem is that traditional methods lack theoretical support as learning vocabulary is more than just memorizing (Nejati et al., 2018). Therefore, in this study, an attempt was made to investigate whether the use of YouTube videos can effectively increase the vocabulary learning of Iranian intermediate learners.

This study aims to address this gap by addressing the following question:

Do educational videos have any impact on Iranian intermediate EFL learners' vocabulary learning?



Literature Review

Background

YouTube is an online video repository where any digital video file can be saved and displayed for free. A wide range of different content and organic interaction with its community makes YouTube a great resource for a wide range of educational endeavors (Watkins & Wilkins, 2011). YouTube is an important part of a learning system that supports independent learning and language learning (Ghasemi et al., 2011). YouTube increases learners' engagement and participation in the classroom and learning strategies. YouTube increases learners' interests and needs in real language by providing authentic discourse. YouTube offers many opportunities to learn a second language because the learner can watch and listen to various types of spoken material (formal, informal), genres (songs, debates, talk shows, film clips), new words or other language skills (Balcikanli, 2011). Teachers can take advantage of YouTube because it enables them to make their class more attractive and independent (Keddie, 2014). YouTube is very useful for learners to memorize words in a meaningful environment. EFL teachers should use YouTube videos in their classrooms to expose learners to the real learning situation. YouTube videos can be used to stimulate cultural lessons and promote the development of authentic vocabulary (Watkins & Wilkins, 2011).

Previous Studies

Some research has suggested that the use of computer-based multimedia can enhance the learning and retention of what has been taught in the classroom (Mayer, 2001; Pourhosein Gilakjani & Rahimy, 2020; Saleh & Gilakjani, 2021). Linebarger et al. (2013) conducted a study on learning vocabulary on television. Half of the children watched the words on the screen. However, other children watched the episodes without printing. Children in the screen-printing group did not indicate further improvement from repeated exposures, and children in the non-printing group with repeated exposures showed reduced vocabulary scores. In another study, Washang (2014) explored strengthening vocabulary memorization by adding a video component to vocabulary classes in English for specific target situations. The results displayed that adding video has a positive effect on students' vocabulary learning. Correspondingly, Isazadeh et al. (2016) investigated the effect of instructional video content in comparison with authentic video content on learning the vocabulary of extroverted and introverted Iranian learners. Findings demonstrated that both instructional and authentic materials have a significant effect on learners' vocabulary learning.

Likewise, Seyed Beheshti Nasab and Pishdadi Motlagh (2017) studied the impact of subtitled cartoons on improving the vocabulary learning of EFL learners. Forty upper-intermediate learners were divided into experimental and control groups. Findings clarified that the experimental group that watched the subtitle cartoons scored better than the control group that watched the untitled cartoons. In the same way, Mirhosseini Chahardeh and Khorasani (2018) performed a study on the effect of pre-teaching new vocabulary items through audio images on the comprehension ability of Iranian EFL students. Thirty male and female intermediate students were divided into two groups. The experimental group was trained in new vocabulary items via audio-visual materials. The results revealed that pre-teaching new vocabulary using audio-visual materials has a positive effect on students' comprehension.

Some studies (Anderson et al., 2008; Suh et al., 2010) on the effect of using digital games on vocabulary learning did not show a significant difference in learners' performance between the experimental and control groups. In another study, Hwang and Huang (2011) examined the impact of watching subtitled video on the reading comprehension of Taiwanese university freshmen. Participants who watched the captioned video did not score higher on the reading test than participants who did not use the subtitles. As mentioned, many studies have been done on the use of educational videos and their impact on improving learners' vocabulary. However, few of these studies (Isazadeh et al., 2016; Mahdiloo & Izadpanah, 2017; Mirhosseini Chahardeh & Khorasani, 2018) investigated the effect of

utilizing instructional videos on the vocabulary learning of Iranian intermediate learners. As a result, current research has endeavored to use YouTube videos to examine whether language learners can improve their vocabulary learning effectively.

Method

Design of the Study

In this study, a quasi-experimental pre-test post-test design was used to understand the effects of YouTube videos on learners' vocabulary learning. There were two groups: experimental and control. The purpose of the pre-test and post-test was to indicate the differences in vocabulary learning outcomes before and after using the "YouTube" video.

Participants

One hundred intermediate participants from a high school in Guilan were selected among 150 volunteers. The Oxford Placement Test (OPT) was used to measure participants' language proficiency to ensure their homogeneity. The selected participants were randomly divided into two groups of control and experimental, each group consisting of 50 learners. The experimental group received the treatment, which was vocabulary learning through YouTube video, while the control group received only the traditional teaching method.

Instruments

The instruments used in this study included the Oxford Placement Test (OPT), pre-test, and post-test. The OPT was used to obtain homogeneous groups. The results of the OPT test were used to identify the homogeneity of the sample before assigning them into two groups. Participants were then divided into the experimental and control groups, each consisting of 50 students, respectively. In order to estimate the participants' vocabulary, a pre-test was performed for participants before the intervention. The researchers chose a reliable vocabulary test adopted by Ahmed Kuhail (2017), the reliability of which was proven through the KR-21 formula. It was used as a pre-test before the experiment, and as a post-test after the experiment. The test consisted of 35 items. The test items were distributed into six main questions.

The test was piloted on 35 students who were randomly chosen to take part in the pilot study. The results of the pilot study indicated that the reliability value for the vocabulary pre-test and post-test using KR-21 was .71. At the end of the pilot study, the researchers made some modifications on the vocabulary test to make it more useful to the actual participants. Pre-test scores were collected and compared with post-test scores to determine participants' progress at the end of the course. After the training, the researchers performed a post-test. Pre- and post- tests had similar materials. Therefore, to measure the participants' vocabulary learning in the post-test, a vocabulary test containing 30 items with the same level of difficulty was used. The reliability of the scores was evaluated using the KR-21 formula ($R = .71$).

TABLE 1

Reliability of the Pre-test and Post-test of the Study

Pre-test and Post-test	Reliability (KR-21)
Vocabulary Test at Intermediate Level	0.71

Procedures

This study was conducted in one of the high schools in Guilan. The researchers used the OPT to identify the homogeneity of the sample before assigning them into two equal groups. Participants were

then randomly divided into experimental and control groups, each group consisting of 50 students. Before starting the treatment in each group, a pre-test was administered by the teacher. YouTube video was selected for the experimental group because it is an important technology application which plays a key role in creating a relaxed learning environment tailored to the learners' needs. It can help to develop vocabulary proficiency inside and outside the classroom. The experimental group was asked to watch two short instructional videos on YouTube, while the other class served as a control group and worked on a reading text through a traditional teaching method. A reading passage from DNR Youth Education and Interpretation (2016) was selected for the control group. The reading passage consisted of two parts. The first part involved "water cycle." The second part included a glossary that defines the key terms.

The teacher performed the treatment for five weeks, two sessions per week. In every session, one instructional video (from YouTube) was taught to the learners. In each session, 40 minutes were allocated to each class to treat and practice new words and discuss different parts of the animation. The teaching process was ten sessions. One session later, the researchers gave the students a post-test. During the process, the researchers asked students to make sentences and asked some questions about the videos. The researchers used some useful techniques for the experimental group, for example, prediction, role-play, and repetition to encourage students to learn and use new words. For the control group, however, the researchers used the traditional teaching method. Finally, the test results were compared to know the effect of the YouTube video on learners' vocabulary learning.

Data Collection

After the researchers informed the participants about the research elements such as goals and advantages in order to collect the data, the OPT was first administered to determine the level of students' skills and homogenize the groups. Second, the vocabulary test was taken. The test consisted of six parts. 30 questions were chosen because they were relevant to this study and 5 questions were ignored due to their lack of relevance to this study. One point was given for the correct answer and zero for the wrong answer. The time allocated for pre- and post-test was 40 minutes. The researchers then collected test papers to analyze.

Data Analysis

To investigate the impact of using instructional videos on Iranian intermediate learners' vocabulary learning, the scores obtained from OPT, pre-test, and post-test were analyzed using Statistical Package for the Social Sciences (SPSS) version 16.0. Then, in order to test the hypothesis, the vocabulary scores of the two groups in the post-test were compared using independent samples t-test and one-way Analysis of Covariance (ANCOVA).

Results

The aim of the pre-test was to determine whether there was a significant difference between the levels of the two groups in terms of pre-treatment vocabulary. The goal of the post-test was to comprehend the difference between the students' levels after treatment in the experimental and control groups and whether the experimental group had made significant progress in post-treatment training using educational videos. The results of test scores were analyzed using special descriptive and inferential statistical techniques.

Descriptive Analysis of the Data

In this section, the researchers provide a descriptive analysis of the data collected in this study. Tables 2 and 3 summarize the descriptive analysis for pre- and post-test of both experimental and control groups.

TABLE 2
Descriptive Results for the Pre-tests of the Study

	N	Mean		Std. Deviation	Variance
	Statistic	Statistic	Std. Error	Statistic	Statistic
Pre EVs Treated	50	17.8800	0.44597	3.15349	9.944
Pre EVs Not Treated	50	18.2000	0.50870	3.59705	12.939
Valid N (list wise)	50				

According to Table 2, the number of participants was 50 in each group. Data analysis indicates that the mean of the pre-test of the experimental group (pre EVs treated) is 17.8800 and the mean of the pre-test of the control group (pre EVs not treated) is 18.2000. Moreover, the standard deviation of pre-test of experimental group is 3.153049 while the standard deviation of pre-test of control group is 3.59705.

TABLE 3
Descriptive Results for the Post-tests of the Study

	N	Mean		Std. Deviation	Variance
	Statistic	Statistic	Std. Error	Statistic	Statistic
Post EVs Treated	50	21.9400	0.52326	3.70003	13.690
post EVs Not Treated	50	18.9800	0.52876	3.73887	13.979
Valid N (list wise)	50				

Table 3 indicates the descriptive analysis for the post-tests of both experimental and control groups. The number of participants for each group was 50, the mean of the post-test of the experimental group is 21.9400 and the mean of the post-test of the control group is 18.9800, the standard deviation of post-test of the experimental group is 3.70003 and the standard deviation of the post-test of the control group is 3.73887.

Inferential Analysis of the Data

This section focuses on the inferential analysis of data obtained from the experimental and control groups of this study.

TABLE 4
Independent Samples T-test Results of the Study

		<i>t</i> -test for Equality of Means		
		<i>t</i>	df	Sig. (2-tailed)
Vocabulary	Equal variances assumed	3.979	98	0.000
	Equal variances not assumed	3.979	97.989	0.000
	Critical <i>t</i>	1.984		

In order to inferentially compare the functional differences of the groups, a sample *t*-test was performed. The data in Table 4 shows that the observed *t* is 3.979 and the critical *t* is 1.984. It is clear that the observed *t* is greater than the critical *t* and high enough to reject the null hypothesis of this study. The degree of freedom of the experimental group is 98 and the degree of freedom of the control group is equal to 97.989. Significance level in the experimental and control groups is less than 0.05. According to these results, the use of instructional videos has positive effects on the vocabulary learning of Iranian learners. Then one-way ANCOVA results are used to determine learners' progress within groups.

TABLE 5
One-way ANOVA Result for the Experimental Group of the Study

Source	Type III sum of squares	df	Mean Square	F	Sig.
Corrected Model	597.626 ^a	1	597.626	391.920	0.000
Intercept	6.766	1	6.766	4.437	0.040
Pre/Post EVs Treated	597.626	1	597.626	391.920	0.000
Error	73.194	48	1.525		
Total	24739.000	50			
Corrected Total	670.820	49			

Table 5 indicates the results of one-way ANCOVA correlations between the scores of the experimental group. The covariance coefficient between the two sets of pre- and post-test scores in the experimental group is 391.920 and the level of significance is 0.000, which means that the difference shown cannot be random, rather, it is due to the effect of independent variable called instructional video. Results of one-way ANCOVA demonstrated that progress was statistically significant for the experimental group.

TABLE 6
One-way ANCOVA Result for the Control Group of the Study

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	658.635 ^a	1	658.635	1.200E3	0.000
Intercept	0.341	1	0.341	0.620	0.435
Pre/Post EVs Not Treated	658.635	1	658.635	1.200E3	0.000
Error	26.345	48	0.549		
Total	18697.000	50			
Corrected Total	684.980	49			

As Table 6 reveals, the covariance coefficient between the pre- and post-test scores of the control group is 1.200E3 and the level of significance is 0.000, which means that the differences are not significant.

Discussion and Conclusion

The aim of this study was to investigate the impact of using instructional videos (YouTube video) on learning the vocabulary of Iranian intermediate EFL learners. The researchers tested the null hypothesis and examined whether there was a statistically significant difference between the mean scores of the experimental group and the control group. The results showed that the observed t (3.979) was greater than the critical t (1.984), which means there was a statistically significant difference at ($\alpha = 0.05$) between the experimental and control groups in the mean score of the post-test.

In addition, there was a statistically significant difference between the means of both groups after treatment. The mean post-test of the experimental group was (21.9400), while the mean post-test of the control group was (18.9800). Therefore, the results indicated that the effect of using YouTube video on vocabulary learning is statistically significant. Moreover, the covariance coefficient between the two sets of pre- and post-test scores in the experimental group was (391.920) and the significance level was (0.000), which indicates that the difference is due to the effect of independent variable (YouTube video). From this great effect, we can point to the appropriateness of YouTube video, which has been done with the aim of enhancing learners' vocabulary learning.

From the findings of this research, it can be stated that YouTube videos are an effective instructional tool that helps learners better understand words. Moreover, significant differences in pre-test and post-test scores indicate that the use of a YouTube video has improved learners' ability to learn vocabulary effectively. The results of this study reveal that learners find YouTube videos useful for learning vocabulary. This finding is in line with the findings of Ghasemi et al. (2011) who believed that the use of video formats helps learners to actively participate in learning their vocabulary.

According to the results, the experimental group outperformed the control group in the post-test and showed that learning vocabulary through YouTube video improves learners' vocabulary knowledge. This finding is consistent with Mahdiloo and Izadpanah (2017), who showed that films can help learners to increase their vocabulary knowledge effectively. The findings of this study are in contrast with some other research (Anderson et al., 2008; Suh et al., 2010) toward using digital games in vocabulary learning and did not show a significant difference in the performance of learners between the experimental and control groups.

The results also revealed that the use of YouTube videos was more effective than the traditional teaching method in learning vocabulary. By using YouTube videos, students feel themselves in a real environment and are more motivated to learn new words. This study aimed to emphasize the significance of the teachers' role, not only in conveying vocabulary knowledge, but also in creating new activities that motivate students to learn new words. Consequently, the classroom is more than just a study space. This is a place where students can gain valuable experiences while learning a foreign language. Furthermore, students were more engaged in learning new words through YouTube than the traditional method, because YouTube was more stimulating and attracted their attention for longer periods of time. This study was conducted under the following limitations. It was performed in one of the high schools in Guilan province. Thus, research in other contexts should be conducted to observe the outcomes more accurately. Moreover, the results of the study were related to the female students. Future research should be done on male students to explore whether gender mediates the process of learning English via educational videos.

The Authors

Mahsa Taati Jeliseh holds a master's degree in English language teaching from Lahijan Islamic Azad University. Her main research interests are CALL, motivation, vocabulary learning, and reading and speaking skills.

Department of English Language Translation
Lahijan Branch
Islamic Azad University
Lahijan, Iran
Email: mahsataati25@gmail.com

Abbas Pourhosein Gilakjani (corresponding author) is an Assistant Professor of TESOL at Islamic Azad University, Lahijan, Iran where he teaches courses in English Language Teaching. His main research interests are CAPT, CALL, and English language skills. He is the member of the editorial board of Cogent Education (ISSN: 2331-186X), Asian-Pacific Journal of Second and Foreign Language Education (ISSN: 2363-5169), and Reading & Writing Quarterly: Overcoming Learning Difficulties (ISSN: 1057-3569).

Department of English Language Translation
Lahijan Branch
Islamic Azad University
Lahijan, Iran
Email: abbas.pourhossein@yahoo.com

References

- Ahmed Kuhail, A. (2017). *The effectiveness of using interactive digital videos on developing sixth graders' English reading skills and vocabulary learning and retention* [Unpublished master's thesis]. The Islamic University of Gaza, Gaza, Palestine.
- Anderson, T. A. F., Reynolds, B. L., Yeh, X. P., & Huang, G. Z. (2008). Video games in the English as a foreign language classroom. *Proceedings of 2008 Second IEEE International Conference on Digital Game and Intelligent Toy Enhanced Learning*, 188-192. <https://doi.org/10.1109/DIGITEL.2008.39>
- Balcikanli, C. (2011). Long live, YouTube: L2 stories about YouTube in language learning. *Proceedings of the 2009 International Online Language Conference*, 91. Universal Publishers.
- Barani, G., Mazandarani, O., & Seyed Rezaie, S. H. (2010). The effect of application of picture into picture audio-visual aids on vocabulary learning of young Iranian EFL learners. *Procedia - Social and Behavioral Sciences*, 2, 5362-5369. <https://doi.org/10.1016/j.sbspro.2010.03.874>
- Ghasemi, B., Hashemi, M., & Bardine, S. (2011). UTube and language learning. *Procedia - Social and Behavioral Sciences*, 28, 63-67. <https://doi.org/10.1016/j.sbspro.2011.11.013>
- Hwang, P., & Huang, P. (2011). Using subtitles to Enliven reading. *English Language and Literature Studies*, 1(1), 2-6. <https://doi.org/10.5539/ells.v1n1p2>
- Ismail, N. S., Zaid, S. B., Mohamed, M. H., & Rouyan, N. M. (2017). Vocabulary teaching and learning principles in classroom practices. *Arab World English Journal*, 8(3). <https://dx.doi.org/10.24093/awej/vol8no3.9>
- Isazadeh, P., Mohammad Zadeh Makui, S., & Ansarian, L. (2016). Effect of instructional vs. authentic video materials on introvert and extrovert Iranian EFL learners' vocabulary learning. *International Journal of Education & Literacy Studies*, 4(4), 1-10. <https://doi.org/10.7575/aiac.ijels.v.4n.4p.1>
- Keddie, J. (2014). *Bringing online video into the classroom*. Oxford University Press.
- Kim, D., & Gilman, D. A. (2008). Effects of text, audio, and graphic aids in multimedia instruction for vocabulary learning. *Educational Technology & Society*, 11(3), 114-126.
- Kurniawan, E. H. (2009). Improving vocabulary ability by using comic. *CENDEKIA Edisi*, 51-61.
- Linebarger, D. L., Moses, A., Garrity Liebeskind, K., & McMenamin, K. (2013). Learning vocabulary from television: Does onscreen print have a role? *Journal of Educational Psychology*, 105(3), 609-621. <https://doi.org/10.1037/a0032582>
- Mahdiloo, A., & Izadpanah, S. (2017). The impact of humorous movie clips on better learning of English language vocabulary. *International Journal of Research in English Education (IJREE)*, 2(2), 16-30. <https://doi.org/10.18869/acadpub.ijree.2.2.16>
- Mayer, R. E. (2001). *Multimedia learning*. Cambridge University Press.
- Mirhosseini Chahardeh, S. M., & Khorasani, R. (2018). The effect of pre-teaching new vocabulary items via audio-visuals on Iranian EFL learners' reading comprehension ability. *International Journal of Research in English Education (IJREE)*, 3(1), 19-27. <https://doi.org/10.29252/ijree.3.1.19>
- Namaziandost, E., Razmi, M. H., Tilwani, S. A., & Pourhosein Gilakjani, A. (2022). The impact of authentic materials on reading comprehension, motivation, and anxiety among Iranian male EFL learners. *Reading & Writing Quarterly*, 38(1), 1-18. <https://doi.org/10.1080/10573569.2021.1892001>
- Nejati, E., Jahangiri, A., & Salehi, M. R. (2018). The effect of using computer-assisted language learning (CALL) on Iranian EFL learners' vocabulary learning: An experimental study. *Cypriot Journal of Educational Science*, 13(2), 351-362. <https://doi.org/10.18844/cjes.v13i2.752>
- Pourhosein Gilakjani, A., & Rahimy, R. (2020). Using computer-assisted pronunciation teaching (CAPT) in English pronunciation instruction: A study on the impact and the teacher's role. *Education and Information Technologies*, 25, 1129-1159. <https://doi.org/10.1007/s10639-019-10009-1>
- Saleh, A. J., & Gilakjani, A. P. (2021). Investigating the impact of computer-assisted pronunciation teaching (CAPT) on improving intermediate EFL learners' pronunciation ability. *Educ Inf*

- Technol*, 26, 489-515. <https://doi.org/10.1007/s10639-020-10275-4>
- Seyed Beheshti Nasab, M., & Pishdadi Motlagh, S. F. (2017). Vocabulary learning promotion through English subtitled cartoons. *Communication and Linguistics Studies*, 3(1-1), 1-7. <https://doi.org/10.11648/j.cls.s.2017030101.11>
- Suh, S., Kim, S. W., & Kim, N. J. (2010). Effectiveness of MMORPG-based instruction in elementary English education in Korea. *Journal of Computer Assisted Learning*, 26(5), 370-378. <https://doi.org/10.1111/j.1365-2729.2010.00353.x>
- Washang, S. (2014). Boosting vocabulary retention through adding a video component to the vocabulary building classes in English for specific purpose situations. *Procedia - Social and Behavioral Sciences*, 136, 89-93. <https://doi.org/10.1016/j.sbspro.2014.05.294>
- Watkins, J., & Wilkins, M. (2011). Using YouTube in the EFL classroom. *Language Education in Asia*, 2(1), 113-119. https://doi.org/10.5746/leia/11/v2/i1/a09/watkins_wilkins

(Received April 29, 2022; Revised May 24, 2022; Accepted June 18, 2022)