Investigating The Effect Of Video Captioning On Iranian EFL Learners' Listening Comprehension

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Abstract

The purpose of the study was to examine the effect of the video captioning on Iranian EFL learners' listening comprehension. A total of homogenized students in a private English language institute in Ilam, Iran (Safir English language institute) participated in the study. The students were randomly assigned to two groups to receive treatments. Both groups watched 10 short episodes (20 minutes) of an English instructional videotape. The difference between these groups was in presence of the caption of the film; that is, the experimental group watched the film with English caption and the control group watched the film without caption. The results of the post-test multiple-choice exam revealed that using captions had a significant effect on students' listening comprehension and those who received the English captions outperformed the other groups. Based on the obtained results, it was concluded that providing captions for Iranian EFL learners could be helpful in overcoming some of their listening comprehension difficulties.

1. Introduction

Listening comprehension is a vital skill in the language acquisition process and its development is of prime concern to language teachers (Dunkel, 1991). Although in terms of the mother tongue listening seems easily acquired, but in fact it is a complex cognitive process and needs a great deal of effort in a second and specially foreign language learning process. Listening can help students build vocabulary, develop language proficiency and improve language usage (Barker, 1971).

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Recent evidence suggests that students' ability to comprehend written material through reading as well as to express themselves through speaking and written communication are directly related to students' maturity in the listening phase of language development. In addition to hearing or perceiving a stream of sounds; listening also requires comprehension of the speakers' intended message. Recently, listening comprehension has been a cornerstone of many theories of second language acquisition (Flowerdew & Miller, 2005). Briefly, the main theme of these theories is that exposure to authentic listening and reading texts to a large extent facilitates an implicit process through which new language and linguistic rules in this way become internalized and can then be automatically reproduced (Brett, 1997). It has been suggested that the level of proficiency achieved in a foreign language is directly affected by the amount of exposure to the target language in its' natural settings (Rott, 1999). Authentic materials refer to oral and written language materials that used in daily situation by native speakers of the language (Rogers & Medley, 1988). Implementing authentic speak in classroom listening allows students to have "immediate and direct contact with input data which reflect genuine communication in the target language" (Breen, 1985). Empirical studies have confirmed the benefits of using authentic materials in classroom (Heron, 199). Gilman and Moody (1984) believe that the teacher employ authentic materials in implementing listening-comprehension training at all levels. Morison (1989) also argued that authentic listening materials can and should be used at all levels from beginners to advance. Since authentic materials are the medium of everybody communication, so even beginning students heed exposure to authentic language (Oxford, 1996). The teacher should exploit more authentic texts in all levels of language instruction in order to involve students in activities that reflects real-life listening (Herron and Seay, 1991). Although all kinds of authentic materials are commonly accepted as helpful for learners, watching films in English is one the richest ways of presenting authentic input, because it is the combination of three mediums named; aural, visual and textual (Ogasawara, 1994).

Despite the importance of technology in facilitating learning process few researchers in Iran have studied the effectiveness of the new technology such as video captioning on language learning process special on listening. Since the learners in Iran study English as a foreign language therefore the chance of being exposed to the target language beyond the classroom is limited for these learners. Additionally, the quality and quantity of language input they gather from their language learning materials and teachers in a limited time in the classroom is not enough to compensate the lack of exposure to real spoken and written language in use. In respect to these problems, recently EFL teachers should provide more authentic materials input to their students in the classroom.

One of the most important tasks that students have is to expose themselves as possible as to their target language. To tackle this task, therefore, they may make use of different authentic materials such as video/TV programs, magazines, and films in English, etc. New technologies such as captions with verbal information and full visual context has beneficial effects on language learning due to more rich and authentic comprehensible input. Captions presents extra linguistic features such as facial expression and gestures and may reinforce learners' comprehension of the conversations (Chapple & Curtis, 2000).

With the increasing popularity and availability of target feature films, using captioned video to facilitate language learning becomes widely welcomed (Brett, 1998). Captions can improve EFL/ESL learners' listening and reading comprehension, vocabulary acquisition and also word recognition. Chai and Erlam in their study of Chinese students concluded that students were able to learn more new words and phrases when they viewed videos with captions. Additionally, the combination of caption and video can help students learn colloquial language and how it is used (Chai & Erlam, 2008). A large body of data concerning the beneficial effects of captioning on listening comprehension of ESL/EFL learners has been reported (Chung, 1999; Huang & Eskey, 2000; Hwang, 2003; Markham, 2001; Markham, Peter, & McCarthy, 2001). For example in a study done by Markham, Peter and McCarthy (2001) they investigated the effects of three different conditions on the comprehension of Spanish-as-FL DVD soundtrack material in the case of university students of intermediate level (Markham, et al., 2001). The result of their study showed that students improved their general comprehension of Spanish-language DVD video via the aid of either English captions or Spanish captions as opposed to viewing the same DVD materials without captions (Markham, et al., 2001).

2. Statement of the problem

Despite the importance of listening practice in language instruction, in many countries English language classes
still emphasize only the skills of reading and writing and listening has been overlooked to the large extent. This problem is especially a commonplace case of an English-as-a-foreign-language (EFL) situation where the English is taught as a subject at school and used only inside not outside the classroom. EFL students are studying English in their home countries where English is not their spoken language, so, these students have very few opportunities to hear real language, therefore they aren't accustomed to hearing the language as it is produced by native speakers for native speakers. Consequently, students from the countries in which English is taught as a foreign language frequently have serious difficulty in understanding English spoken to them when they come into contact with native speakers of the language. Besides, the quality and quantity of language input they receive from their language learning materials and teachers in limited time of the classroom is not enough to real spoken and written language in use. One solution to this challenge is implementation of authentic aural materials such as film captions in the listening classroom. Many teachers believe that captions shed some new lights on a better way of using various multimedia in an ESL/EFL classrooms. It has been suggested that captions make education more accessible and educators have been trying continuously to facilitate language teaching and language learning (Chung, 1999; Koskinen, 1993; Parks, 1994; Vanderplank, 1993). Accordingly, the present study is going to answer the following questions:

1. Does using captions help improve Iranian EFL learner's listening comprehension?
2. Does learners' level of proficiency affect their benefit from caption?

3. Method

3.1 Participants

The participants of this study were selected from among 100 Iranian EFL learners of a private English language institute in ilam, Iran (Safir English language institute). Before the onset of the study a quick placement test (Allen, 1992) was given to students (N=100). Out of the given population 66 student with approximately the same score were selected. Based on their obtained scores of placement test, they were divided into 2 groups (control and experimental) at three proficiency levels, elementary, intermediate and advanced groups. Two teachers taught the students. Each teacher taught one group at three levels of proficiency. The participants were all native Persian speakers and English was their foreign language.

3.2 Instrument

For the purpose of the study and to investigate the hypotheses, several instruments were utilized.

3.2.1. The Oxford Placement Test (OPT)

The placement test is a test to determine specific knowledge or proficiency in various subject for the purpose of assignment to appropriate courses or classes. For the purpose of this study, the oxford placement test (Allen's 1992) was selected. The test is divided into two sections. The first section aims at the testing of listening, while the second section is a test of grammar, vocabulary and reading skills. The first part of this test was selected for this study.

3.2.2. Pre-test/post-test

Pre – test / Post – test is a measurement of the learning received during the class as a result of comparing what the student knew before in a pre – test and after the class experience in a post -test. In this study an English proficiency test of TOEFL (TOEFL IBT) consisting of 30 multiple choice questions was administered twice, once as pre – test and second as post – test. This test include two listening skill, understanding gist and understanding the details.

Gist questions are questions that ask about the overall ideas of a passage as a whole. They may ask about the subject, topic or main idea of a passage. They may also ask what overall purpose the passage serves. The gist of a passage may be directly stated in the passage or may have to synthesize and bring together) information from
different parts of the passage to understand the overall gist. Details questions ask the students about specific pieces of information that are stated in a passage. As the student listen to each passage, they should focus on the details from the passage because questions about details quite commonly accompany the passages. Multiple choice questions are used to test details and these multiple-choice questions may have one correct answer or two correct answer

3.2.3. Videotape

An instructional video tape called connect with English was used as the study instrument. Connect with English is a series of ESL instructional videos. It is produced by WGBH Boston with major funding from the Anneberg/GPB project in 1998.10 episode of this video were used in this study.

3.3 Procedure and data collection

Data collection procedure is divided into two periods of the research. The first part consists of pre-test while the students are required to take the post-test in the second part of the study. Pre-test help measure true learning. By comparing pre-test and post-tests, teachers can see what students actually learned from the lessons that were developed.

Before the onset of the study, a Quick Placement Test (Oxford Placement Test, Allens' 1992) was administered to the students. Based on the results of the placement test, the students were divided into 3 proficiency levels. Before the training sessions all groups were given a pre-test in listening comprehension. To this end an English proficiency test of TOEFL consisting of 30 multiple choice questions was administered as pre-test. In order to calculate the reliability of the pre-test TOEFL exam, it was administered to 30 students of an English language institute as the pilot group of this study. Using Cronbach alpha coefficient was calculated as 0.71 which is an acceptable reliability coefficient. Also, after the final administration of the TOEFL test on 66 students of this study, the reliability coefficient was again calculated by using Cronbach alpha coefficient and the result was 0.74 which is an acceptable and favorable reliability coefficient.

As the next step, the participants were randomly divided into 2 groups, control group and experimental group. The difference between these groups was in the presence of the caption of the film; that is, an instructional video tape called connect with English was used as the study instrument. Connect with English is a series of ESL instructional videos. It is produced by WGBH Boston with major funding from the Anneberg/GPB project in 1998. 10 episode of this video were used in this study. The entire package of instructional materials consists of 25 videos containing forty-eight fifteen-minute story episodes in which the story attempts to use a soap opera approach to language learning. Each specific them contains two fifteen-minute episodes, placing emphasis on an authentic target language environment, real social life setting and U.S. cultural exploration. The story line of Connect with English is constructed so that students learn the language they need specific to a variety of situations such as work, school, home, hospitals, and urban and rural locations throughout the United States. It is an influential way not only to improve English language proficiency, but to increase awareness about American culture, values and way of life. This program, embodies Krashen’s Input Hypothesis.

Experimental group watched some episodes of this videotape with English caption, while the control group watch the same video without caption. Experimental group watched the film with English caption and control group without caption. At end of the treatment, English proficiency test of TOEFL was administered again, but this time as post-test. Instruction were given to students both in English and Persian to avoid any misunderstanding of the participants.

3.4. Data Analysis

For the evaluation of the differences between the groups, different statistical procedures such as Independent sample T-test, Paired-sample T-test, ANOVA, etc. were used at the end of the study. The results were analyzed using Statistical Package for the Social Science (SPSS).

4. Results
4.1 Overview

This study sought to investigate the effects of using video captioning on Iranian EFL learners' listening comprehension. The effects of learner's proficiency on their benefits from captioning was also investigated. Then in the light of the previously stated research questions, results are explained so as to confirm or reject the hypotheses. Accordingly, first the descriptive tables and graphs will be presented. This will be followed by the inferential statistics.

4.2 Descriptive tables

Table 1: Frequency distribution of sample group based on Experimental group and Control group

<table>
<thead>
<tr>
<th>Group</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>33</td>
<td>50.0</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Control</td>
<td>33</td>
<td>50.0</td>
<td>50.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

As table 1 shows, a number of 33 students participated as Experimental group and 33 students participated as control group.

Table 2: Frequency distribution of sample group based on proficiency level

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>22</td>
<td>33.3</td>
<td>33.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Intermediate</td>
<td>22</td>
<td>33.3</td>
<td>33.3</td>
<td>66.7</td>
</tr>
<tr>
<td>Advanced</td>
<td>22</td>
<td>33.3</td>
<td>33.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows that sample group is based on three levels of proficiency named elementary, intermediate and advanced levels.

4.3 Inferential tables

4.3.1 Analyzing the first research null hypothesis

H₀₁: Using video captioning doesn't help to improve Iranian EFL learner's listening comprehension.

Table 3: Paired Samples Statistics Comparison of difference between pre – test and post – test scores of experimental group

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Pre-test</td>
<td>13.83</td>
<td>33</td>
<td>1.594</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>14.839</td>
<td>33</td>
<td>1.8607</td>
</tr>
</tbody>
</table>

In order to compare pre-test and post-test scores of experimental group, paired sample statistics was run. As table 4.3 shows since the obtained significance level of experimental groups who received video captions is less than 0.05, so the first null hypothesis will not be accepted. In other words, between the pre-test and post scores of experimental there is a significant difference.

4.3.2 Analyzing the second research null hypothesis
H0^2: Learners' level of proficiency doesn't affect their benefits from caption.

In order to investigate the effect of learners' proficiency level on their benefit from captions, the analysis of variance test (ANOVA) was run. Table 4.4 shows the results of ANOVA test.

<table>
<thead>
<tr>
<th>ANOVAa</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>26.173</td>
<td>2</td>
<td>13.086</td>
<td>4.640</td>
<td>.018</td>
</tr>
<tr>
<td>Within Groups</td>
<td>84.616</td>
<td>30</td>
<td>2.821</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>110.789</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As table 4 shows since the obtained significance level is less than 0.05, so the second null hypothesis will not be accepted. In other words, between the post test scores of different levels of proficiency there is a significant difference.

5. Discussion and Conclusion

Captioned video and audio materials for L2 learning are becoming more common. The most useful auxiliary for watching videos are captions (Hsu, 1994). Sometimes the students who watch movies in a foreign language can't understand completely what heard because the connection of foreign language and its meanings are limited. Consequently, by using new technologies in general and captions in particular, the effectiveness of listening comprehension will be significantly enhanced. This study was an attempt to investigate the impact of the presence of English captions on Iranian EFL learners' listening comprehension.

As the results of the study revealed, the students in the experimental group who watched the film with English captions outperformed the students in the control group. The experimental group answered the post–test questions better than the control group. According to the result of this study, the first null hypothesis could be safely rejected and it was concluded that providing caption was helpful and influential in improving Iranian learners' listening comprehension. By providing captions, learners would have a valuable chance of understanding the films content and captions are means of enhancing students' comprehension of the film in their second or foreign language.

Regarding the first research question, the results of the present study were to a great extent compatible with those of Borras and Lafayette, 1994; Dannan, 2004; Markham and Peter, 2003, who found that combining captions with audio – visual materials is an effective instructional method to enhance the listening and reading comprehension of a second language. In this situation, learners can confirm the information they heard by way of the support provided by the captions (Froehlich, 1998, Grammer, 1992; Vanderplank, 1998).

The results are also congruent to those of Danan, 2004; Bird and William, 2002. They found that captions visualize the auditory information of the foreign language which the learners hear in the video (Danan, 2004). Due to this cognitive processing, captions and subtitles promote language comprehension (Bird and William, 2002).

With respect to lack of authentic listening materials in EFL listening classrooms, captions provides authentic materials for learners. As Nagle and Sander, 1986; Paulston and Burder, 1976 concluded, teachers should use listening materials that consist of samples of natural language from different sources so that students have experienced varieties of topics, situations and speakers. To better prepare students for real-world situations and enable them to react accurately to the spoken language outside the classroom, it is necessary that teachers provide their students with ample opportunities to listen to samples of natural or real language in the classroom (Joiner, Adkins and Eykyn, 1998).

In regard to effect of comprehensible input on language learning, the results were to some extent congruent to Krashen (1980). Krashen (1980) believe that by receiving and processing comprehensible input the learners of a second language understand the messages and so that language acquisition take place. The belief that captioned TV programs or captioned are effective educational tools for L2 learner agrees with the second-language acquisition hypothesis of Steven Krashen. One influential way to activate the learners' acquisition unconsciously is supply the time with abundant comprehensible input.
The results are also to some extent echoed the finding of similar research in other contexts conducted by Brett, 1995, Hoven, 1959, and Seo, 2002. They agreed that video which provide visual, contextual and non-verbal input, provide foreign language learners with simultaneous visual and aural stimuli which can make up for any lack of comprehension resulting from alone. Bird and Williams, also claimed that captioning is a very beneficial language learning tool by looking at how a bimodal presentation (aural and visual) of new words affected the learning of the words. The results of the study, with respect to the effect of captions on Iranian EFL learners listening comprehension are inconsistent with the results of Vandergrift (2007). He suggests that when learners are provided with subtitles, they can obstruct their familiarity with pronunciation. Wang (2007) also believes that no matter what language they are in, captions are distracting and create a form of text dependence.

The second finding of this study regards the effect of learners' proficiency level on their benefits from captions. One of the major contributing factors for benefits from captions is learners' level of proficiency. The results of the study showed that advanced-level learners who viewed the videos with captions outperformed than beginning and intermediate level learners. This is consistent with Taylors' study result. (Taylor, 2002). He investigated whether captioned video was beneficial for beginning-level learners. He found that third and fourth-year students was also used captions. The result of Taylors' interview with learners showed that those who used captions were able to describe how they used the pictures, sound and captions to understand the video.

The results are inconsistent with those of Markham, 1989; Guillory, 1998; and Taylor, 2005. Markham (1989) found that captions might not be as important for advanced learners since according to the results of his study, beginners performed better when they supported with caption and videos. He also suggests that captions were more helpful to advanced learners when the video materials were abstract or complex.

Gillory (1989) concluded that captions are beneficial for beginning-level learners, and they benefit more when only keywords are presented on screen as caption than having entire sentences.

According to the result of this study, the second null hypothesis, also could be safely rejected. Based on the results of the study it can be concluded that using captions with English films, helps foreign language students in their understanding and comprehension of film content. Captions can increase the students’ knowledge of the target language and enhance language learning by the use of new lexicons and phrases in an appropriate context. This view is supported by Paivio (1971), Garza (1991), Krashen (1981, cited in Stewart and Pertusa, 2004) and Vanderplank (1988).

Vanderplank (1988) believes that captions might have potential value in helping the language acquisition process, by providing language learners with the key to massive quantities of authentic and comprehensible language input.

When the students have access to the captions, their reading ability will help their listening comprehension, and their understanding of the film will be improved. Furthermore, providing captions can reduce the level of anxiety which is common during the listening comprehension tasks, at least among lower proficiency level language learners.

References


Chung, J. m. (1999). The effects of using video texts supported with advance organizers and captions on Chinese college students' listening