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The Impact of Content Visuals on Listening Comprehension Ability of Iranian EFL Learners

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Abstract

Listening comprehension is the skill which must be worked on from the beginning of language instruction since its improvement closely aids the improvement of the oral production. But it seems that both language learners and teachers face great difficulties working on this skill. For language teachers it is difficult since there are no exact rules to teach it as there are rules for grammar and writing and for learners it is difficult since working on listening is a tiring task. On the other hand, the tendency toward the use of the visuals in listening comprehension programs has been increasing in recent years. It seems that visuals, mainly in the form of videos and pictures have won interests in such a way that teachers devote most of their listening classes' times to movies. But there are still doubts about the effectiveness of videos and pictures and about their superiority to audio-only materials. Therefore, this study was done to uncover the power of content visuals in the form of videos and pictures in improving listening comprehension ability. In fact, it was done to reveal if there was any difference between the use of content visuals (videos and pictures) and audio-only materials in case of their effectiveness in improving listening comprehension ability. To do so, the researchers selected eighty female and male English learners and randomly divided them into four groups of twenty and each group attended a computer-based listening test to accredit the homogeneity. Then each group received some sort of instructions. It means that each group was instructed, using a special type of listening material. At the end of the instruction, the participants sat for the post-test, which was again a computerized version of TOEFL-IBT test. After the analysis of the data, it was revealed that there is no significant difference between the use of content visuals (videos and pictures) and audio-only materials in listening programs. In fact, the results suggested that picture-audio materials are a bit more powerful than both videos and audio-only materials, and videos proved to be the weakest format among all. However, the differences were scant but they are not

negligible and language teachers must keep this fact in mind that videos do not work as well as pictures and audio-only materials.

Keywords: Content visuals, Context visuals, Listening comprehension, Multimedia learning, Multimedia technology, Visual aids

Introduction:

It seems that visual aids have won interests in case of being the most favored materials in listening comprehension programs. Videos and pictures are defined as the selection and sequence of messages in an audio-visual context. As language teachers we witness that not only learners show great interests in watching videos but also institutions use videos as the most emphasized material in their listening programs. After the advent of computers and their subsequent use in the field of technology watching films changed into a common program of language classes mostly considered as the listening material. Today, a considerable confidence is placed in the value of audio-visual aids to improve listening ability of language learners, yet there is little empirical data and research to support the idea that visuals in the form of videos and pictures better facilitate listening comprehension of foreign languages.

However, with the amount of time devoted to using videos in the Foreign or Second Language (F/SL) classrooms, more researches are needed to show if audio-visual aids improve listening ability. Up to now, different studies have been done using visual aids but not using actual foreign and second language videos. This is a big problem. Researchers must try to use the right materials as their visual aids. However, it is clear that if visuals in the form of videos are to be used in the classroom to improve listening comprehension, they should be shown in segments and not as a whole. These segments should be broken down to exploit the macro-listening skills and the micro-listening skills from the audio-component of the video.

On the other hand, experts believe that there is steel scant empirical proof to verify the effectiveness of visual aids. It is also worth mentioning that the results of the researches that focused on the role of visuals in L2 listening programs provided controversial results. The results obtained from a large number of studies proved that visuals facilitate learners' performance on L2 listening comprehension and listening tests (see Ginther, 2002), but the results gained in a number of other studies proved no facilitative effect of visuals on testing learners' listening comprehension (Coniam, 2001; Gruba, 1993; & Ockey, 2007). Thus, it seems that there are still many questions about the effectiveness of the visuals, the preferred type of visuals and the preferred format of visuals. With such unanswered questions yet to be proven with quantitative measures practitioners must ask themselves if there is sufficient evidence to support continued use of audio-visual aids in the area of listening comprehension.

It is clear that some of the questions have been addressed in recent years, but the field is so extensive that it still demands more researches that address the same questions in different contexts. For example, Balatova (1994) suggests that unlike a student, who listened in sound only conditions, the use of video and sound conditions were more consistent in their perception of the story, in the sense that difficult and

easy passages formed a pattern. There are also other researchers who tend to agree that compared to an audio medium, video is more authentic in terms of context, discourse, paralinguistic features, and culture (Coniam, 2001).

On the other hand, in some studies it was found that visuals have little, if any, effects on facilitating the understanding of verbal information (Lynch, 1998).These controversies illustrate that visual cues are important, since they either facilitated or distracted comprehension of the spoken language. Thus, the problem which is under investigation in this study is to answer a salient question about the use of content visuals in the listening comprehension programs. This is worthwhile, because Iranian English learners have difficulty in comprehending spoken English and also in listening section of the tests. The outcomes of this study will also help language teachers to decide to use the content visuals in their listening improvement programs or not, and if it is suggested to use the content visuals, which type is preferable to the other types. This way, a language teacher can surely decide about the use of the content videos and pictures in his/her listening program.

Review of the Related Literature:

Based on the important technological developments of the last decades, today it is possible not only to use the media in the field of language teaching but also to combine texts with sounds and different types of media, such as images, graphics, animations and videos. Through the use of multimedia it is possible to blend sounds with pictures, animations and videos to be used in the listening classes. It gives learners the opportunity to hear the material while they are watching the participants of the conversation or the sole speaker or some other related pictures and videos. The anecdotal evidences suggest that the use of media contributes to the comprehension of the oral language but actually, there is no compelling evidence that the use of computer technologies improve listening comprehension skills of the learners. It was stated that "Multimedia learning occurs when new information is presented to students in several modes, for example in pictures and words" (Mayer, 1997). It seems that the use of visuals facilitates the process of language learning and teaching when the textual information presented is accompanied with visuals. According to Mayer (1997), learners can build connections between verbal and visual stimuli more effectively when the text and illustrations are presented contiguously or simultaneously.

However, it must be stated that Mayer's (1997), contiguity effect of visuals imply a connection between the textual information and the information contained in content visuals, not context visuals. Ginther (2002), declares that context based visuals can be distracting for learners when they look for content based information. There is also another theory called Generative Theory of Multimedia that describes the interaction occurring among textual, visual, and individual variables in learners' comprehension of the spoken language. Mayer's (1997) generative theory of multimedia learning sheds light on the learners' integration of verbal and visual information to comprehend a spoken text. He summarizes his theory in the following way:

"In a generative theory of multimedia learning, the learner is viewed as a knowledge constructor who actively selects and connects pieces of visual and verbal knowledge. The basic theme of a generative theory of multimedia learning is that multimedia instruction affects the degree to which engage in the

cognitive processes required for meaningful learning within the visual and verbal information processing system" (Mayer, 1997, p. 4).

Thus, the generative model of multimedia learning implies contiguity, simultaneity and integrity of textual and visual information for effective learning to occur. This model introduces three processes involved in multimedia learning: selecting words and images from the input, organizing them into visual and verbal mental representations, and integrating them.

Brinton (2001), supposed that multimedia tools serve as an important motivator in the language teaching process because "media materials can lend authenticity to the classroom situation, reinforcing for students the direct relation between the language classroom and the outside world" (Brinton, 2001, p. 461). Hartnett (as cited in Brinton, 2001), shared that perspective by saying that media tools appeal to students' senses and help them process information, thus empowering their understanding of the target culture and increasing their motivation toward language learning, reinforcing the teaching points, and saving the teacher unnecessary explanation.

Now the emphasis in foreign language learning has moved from a traditional approach - one that focuses on the study of the language itself - to a communicative approach in which learners acquire both linguistic and cultural competence. The application of multimedia tools can foster this goal by creating "a learning environment where in students practice their language skills and acquire target culture" (Brauer, 2001, p.130). According to Ginther (2002), generally there are two types of visuals: context visuals and content visuals. As the name suggests context visuals provide information about the context and whatever which is available in it such as participants, objects and the whole setting. For example, a picture that shows a girl and a boy who are speaking in a park. Ginther (2002), states that this kind of visuals firstly set the scene for the verbal exchange and secondly indicate a change of speakers in the conversations.

On the other hand, content visuals relate to the content of the verbal interaction and include pictures, drawings and diagrams. For example, a teacher is speaking about the technology while students are looking at a picture of a computer. Bejar, et al., (2000), introduces four types of content visuals that affect comprehension differently: content visuals that replicate the audio stimulus, content visuals that illustrate the audio stimulus, content visuals that organize information in the audio stimulus and content visuals that supplement the audio stimulus. Bejar, et al., (2000), states that the last type of content visuals not only does not facilitate comprehension but also makes it harder. In addition, to the introduction of the general types of visuals, videos and pictures that are used as the manifestations of visuals in language learning programs are introduced in the following sections.

Stempleski (1994), explored video as a tool of foreign language learning:" In addition to being a flexible vehicle for comprehension practice or for the presentation of new language, video, particularly in its authentic forms, effectively stimulates language production, especially with intermediate- and advanced-level students. Using video as a stimulus for classroom communication usually involves student interaction in pairs and groups and manipulation of the television technology to create an information gap that the learners must fill... Video technology offers the obvious advantages of stop/start, rewind/replay, sound on/off, and freeze-frame controls".

These facilities make it possible for the teacher to present different sections of the video once or several times in different ways. For example, a teacher may decide to turn the sound control off and show only the video pictures to the students, preview video sequences, select viewing activities, and adapt the

language exercises to fit their students' needs and different classroom situations.' (Stemplesky, 1994, pp. 8, 12-13). A parallel view was taken in the evaluation of video teaching by Schrum & Glisan (2000), stating that video provides the context for a wide variety of communicative and interactive activities in the classroom. Exercises such as class surveys, problem resolution, video title and ending discussions, brainstorming, video summaries, and information-gap exercises are just some examples.

As it was shown in chapter one most experts working on the use of videos in L2 listening programs, believed that the use of videos could promote comprehension of the spoken language (e.g., Coniam, 2001; Ginther, 2002). On the contrary, some others stated no facilitative or somehow debilitative effects of videos on the comprehension of oral language (e.g., Gruba, 1993; Ockey, 2007). Pictures are the second type of visuals that are used in this study. Similar to videos there are different views about the use of pictures in L2 listening comprehension programs. It seems that in the case of pictures there are more shared ideas among experts. Most experts advocate the use of pictures in L2 listening programs and they believed that the use of pictures could promote comprehension.

Teachers can use two types of pictures in listening programs: to use just a still picture or to use a series of related pictures. The results of the studies shows that it has been suggested that it is desirable to use just a still picture in listening programs since there is the possibility of concentration lose when pictures move and change in a listening set. Totally, the use of pictures has been advocated over the use of videos because students can concentrate more and it leads to comprehension in a more facilitated way.

Methodology

Participants

Participants of this study are 80 male and female students learning English in Islamic Azad University at Marvdasht branch. They were chosen based on the availability factor. The researchers were not able to choose the participants randomly because they did not access to the whole population. For the purpose of this study the researchers needed learners at an intermediate level because they will use a TOEFL listening test at the end of the study and most of the candidates of the TOEFL are language learners with an intermediate level of proficiency. On the other hand, it is assumed that advanced and elementary learners are not affected by the visual aids. The researchers of this study did not compel anybody to attend this study. They let everyone choose to attend the study or not through signing a consent form. On the other hand, they are sure that this study will have no side effects on the participants. They also ascertained the participants that their names will be kept secret. Although a big limitation of this study was about the selection of the participant the researchers tried to do their best to consider the representativeness of the sample to increase the possibility of the generalizability of the findings.

Design

This is a quasi-experimental research project, because participants were selected from the accessible population and then they were randomly assigned into four groups after achieving the accepted score in the pre-test. This study also involves the manipulation of the independent variables, although, it lacks randomization, because the researchers do not have access to the whole population. However, they randomly assigned participants to four prospective groups. It is also a type of quantitative researches

because it involves numerical data collection and statistical data analysis to show the differences of using each type and format of the visuals in the study. This research has also a categorical design because it benefits from various independent variables.

Instrumentation

To check the impact of visuals on the listening comprehension ability of the participants of this study the researchers use two samples of the listening section of TOEFL IBT, one as the pre-test and the other as the post-test. It must be mentioned that both pre-test and post-test are actually computerized version of TOEFL because participants do not answer the questions online. For the treatment the researchers try to find the suitable sources for the content videos. In case of still pictures the researchers use some pictures in accordance with the type of the visual. In case of audio-only material the researcher will use sample audio materials of TOEFL that are available in the market.

Procedure

The researchers selected 80 female and male students of translation and teaching English and then randomly assigned them into four groups of twenty after the administration of the pre-test. The pre-test was a sample of TOEFL IBT listening section which was available in the market. Therefore, it was actually a type of computer-based listening test rather than an internet-based test. After the administration of the pre-test the treatment started. All these 4 groups receive some sort of treatment for the purpose of the study. G1 attends the listening classes with audio-only materials. For G2 content videos are used. For G3 only content pictures are used. G4 attends a class in which a combination of all materials including content videos, pictures and audio-only material is used. The instruction lasts for about two months. At the end of the instruction all the participants attend the same post-test, at the same time, and in the same place similar to that of the pre-test. Another sample of TOEFL IBT listening test is used to examine their listening ability.

Results and Discussions

Statistical Analysis of the Pre-test

The researchers intended to reveal if different types of input affect participants' performances on the listening tests differently. To do so, they had to prove that they all were at the same level of language proficiency and specifically listening ability. Therefore, they first asked the participants to sit for a proficiency test. After the results of this test showed that the participants were at the same level of language proficiency, they performed the pre-test. The pre-test's format was exactly similar to that of the post-test. The researchers used a version of the listening section of the TOEFL IBT and the participants attended the test. This way, the researchers could be ascertained if all the participants had the same level of listening ability in English before the instruction and they could also prove if their instruction was useful if any change is observed later on. The following table (table 4.1) shows that all the participants of each group were at the same level of listening ability before the start of the instruction. It shows that there were no differences between the performances of the groups in their pre-test. As the table shows the pre-test's mean scores of G1 (audio-only group), G2 (video group), G3 (picture group) and G4 (combination group) are alternately 15.55, 15.12, 14.85 and 15.32. These mean scores show that there were no

meaningful differences between the scores. Thus, the researchers could claim that all the participants of all four groups were at the same level of listening ability before the instruction.

Table 1 (descriptive statistics of the pre-test)

	N	Mean	Std. Deviation	Minimum	Maximum
pre.G1	20	15.5500	1.66938	11.00	18.00
pre.G2	20	15.1250	2.12054	11.00	19.00
pre.G3	20	14.8500	2.09071	11.00	19.00
pre.G4	20	15.3250	2.00181	11.00	19.00

Statistical Analysis of the Post-test

After the end of the instruction which lasted for two and half a month, the participants attended the post-test. The aim of the post-test was to reveal if the participants' performances on the listening test had changed for the better or not and also if their performances had changed, which group had the best performance and which one had the worst. The following table (table 4.2) proves that the groups' performances on the post-test had changed for the better in compare to the pre-test, but the groups did not have similar performances. It confirms that different listening materials had different impacts. As the table shows the mean scores of the G1 (audio-only group), G2 (video group), G3 (picture group), and G4 (combination group) are alternately 21.12, 20.40, 22.32, and 20.20. This table shows that there is a significant difference between the mean score of the G3 (picture group, 22.32) and the mean scores of both G2 (video group, 20.40) and G4 (combination group, 20.20).

Table 2 (descriptive statistics of the post-test)

	N	Mean	Std. Deviation	Minimum	Maximum
post.G1	20	21.1250	1.65335	18.00	24.00
post.G2	20	20.4000	1.27321	18.00	22.00
post.G3	20	22.3250	1.45344	20.00	25.00
post.G4	20	20.2000	1.22903	18.00	23.00

The answers to the research questions

This study was done to show if there is any difference between the use of content visuals and audio-only format materials in improving listening comprehension ability of the English learners. On the other hand,

the researchers intended to show which format of the content visuals is preferred to the other formats. After the end of the instructions, the results of the quantitative data analysis showed that all the groups had better performances on their post-test in compare to the pre-test.

The following table (table 4.3) shows that each group's post-test score is higher than its pre-test score. This confirms that all the instructions had changed the participants' performances for the better. The results also reveal that there is no significant difference between the use of content visuals and audio-only format materials in improving learners' listening ability. The mean score of G1 (audio group) is 21.12 and the mean score of G2 (video group) is 20.40, and the mean score of G3 (picture group) is 22.32. Thus, it was concluded that the answer to the research question is no, and it can be claimed that there is no significant difference between the use of audio-only materials and the use of content visuals in listening comprehension programs.

Table 3 (descriptive statistics of both the pre-test and the post-test)

	N	Mean	Std. Deviation	Minimum	Maximum
pre.G1	20	15.5500	1.66938	11.00	18.00
pre.G2	20	15.1250	2.12054	11.00	19.00
pre.G3	20	14.8500	2.09071	11.00	19.00
pre.G4	20	15.3250	2.00181	11.00	19.00
post.G1	20	21.1250	1.65335	18.00	24.00
post.G2	20	20.4000	1.27321	18.00	22.00
post.G3	20	22.3250	1.45344	20.00	25.00
post.G4	20	20.2000	1.22903	18.00	23.00

The following charts (chart 1, 2, 3 and 4) also confirm the same fact as the table 4.3, and reveal that all the groups had better performances on the post-tests in compare to the pre-tests, which means that all the instructions were effective in improving participants' listening abilities, however, the groups' performances on the post-tests, were not significantly different:

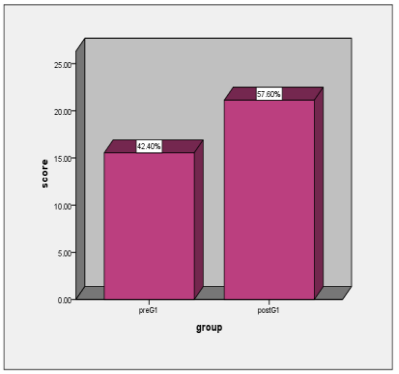


Figure 1 (the difference between G1 pre-test and post-test)

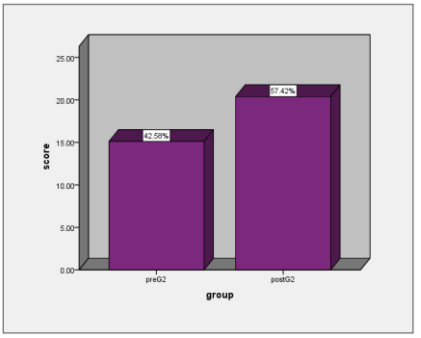


Figure2 (the difference between G2 pre-test and post-test)

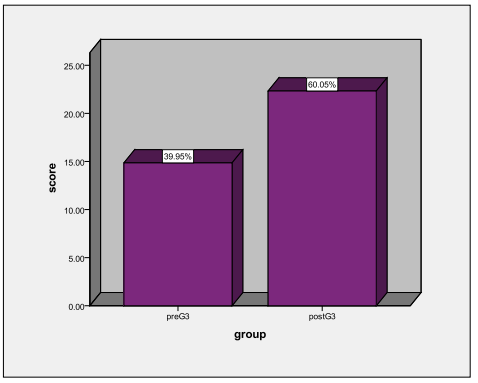


Figure 3 (the difference between G3 pre-test and post-test)

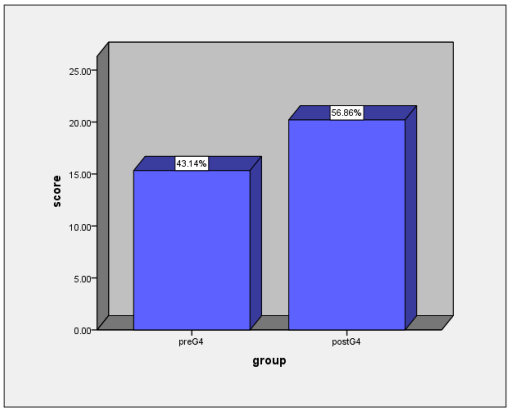


Figure 4 (the difference between G4 pre-test and post-test)

Discussions

Comparing the results of the pre-test with the results of the post-test, the researchers can make different claims:

First, they can claim that all the participants in all four groups were at the same level of listening ability in English before the start of the instruction. The pre-test's mean scores of the groups prove this fact.

Second, they can claim that their instructions were useful with no regard to the type of the different listening materials that they used in each class for each group. If one looks at the pre-test mean score of each group and then compares it with the group's post-test mean score, he will realize that all the groups' performances had changed for the better in their post-tests.

Third and the most important claim, not only all the groups' performances changed for the better after the instruction, but also the groups did not have similar performances, although the differences were not great. G3 (picture group) had the best performance, G1 (audio group) had the second best performance, G2 (video group) came after G1, and G4 (combination group) had the worst performance. These results show that picture materials are the best materials which can be used to strengthen listening ability and it is not a good strategy to use all the types of the listening materials in a single class at the same time.

Conclusions

At the end of the study, the quantitative data of the pre-test and the post-test were analyzed. The statistical analyses of the pre-test data showed that there were no meaningful differences between the performances of the participants of each groups. It means that all the four groups' participants had the same listening ability before the start of the instructions. On the other hand, the analyses of the post-test data showed that the participants had better performances in compare to the pre-test. The post-test's mean scores of all the groups were remarkably higher than their pre-test's mean scores. It reveals that the instructions had changed all the groups' performances for the better.

However, the same results showed that there is no difference between the use of content visuals (videos and pictures) and audio-only format materials in listening comprehension programs, since no significant

differences were spotted between the mean score of the audio group and the mean scores of both video group and picture group. Therefore, it can be stated that although the instructions changed the groups' performances but these changes were somehow similar between the proposed groups. The results showed that the post-test's mean score of G1 (audio group) came somewhere in the middle of the post-test's mean scores of G2 (video group) and G3 (picture group). Thus, it can be claimed that there is no difference between the use of audio-only materials and content visuals in the form of videos and pictures to improve the listening ability of English learners in listening comprehension programs. The only limitation is about the use of the combination of these formats since the results showed that G4 (combination group) had the worst performance on the post-test. Thus, it is not recommended to use a combination of different materials in a single class time.

Pedagogical Implications

At the end of the project and based on the outcomes the researchers proposed the following pedagogical implications:

First, the results of the study proved that there is no significant difference between the audio-only materials and content visuals in the form of videos and pictures in case of their effectiveness. The results suggested that both audio-only materials and content visuals help the learners to improve their listening ability in a similar way. Therefore, it is not important if language teachers did not have access to visual materials to use in their listening classes. They must know that audio materials have the same impact.

Second, although the results of the study proved that there is no significant difference between the audio materials and content visuals, but the same results also discriminated between the content videos and pictures. It was revealed that content still pictures are potentially more effective than content videos in improving learners' listening ability. Thus, language teachers must keep in mind that it is appreciated to devote more class time to audio-picture materials than videos.

Third, the results of the study revealed that content visuals and audio-only materials had the same power in strengthening the listening ability. However, the results warned us about the use of these materials at the same time. The results showed that the group of the participants which were instructed using all the formats in a single class time had the worst performance on their post-test. So, it is recommended that teachers must not use audios, videos, and pictures alternately in a single class time.

References:

Balatova, I. (1994). The impact of the video on the comprehension skills. Canadian Modern Language Review. 50, 507-531.

Bejar, I., Douglas, D., Jamieson, J., Nissan, S., & Turner, J. (2000). TOEFL 2000 listening framework: A working paper. Princeton, NJ: Educational Testing Service.

Brauer, G. (2001). Pedagogy of language learning in higher education: An introduction. A blex Publishing, Westport, Connecticut.

Brinton, D. M. (2001). The use of media in language teaching. In Celce-Murcia, M. (Ed.), Teaching English as a second or foreign language (pp. 459-475).

Coniam, D. (2001). The use of audio or video comprehension as an assessment instrument in the certification of English language teachers: A case study. System, 29, 1-14.

Ginther, A. (2002). Context and content visuals and their effects on listening comprehension. Language Testing. 19, 133-167.

Gruba, P. (1993). A camprison study of audio and video in language testing. JALT Journal, 15(1), 85-88.

Lynch, T. (1998). Theoretical perspectives on listening. Annual Review of Applied Linguistics 18, 3-19.

Mayer, R. E. (1997). Multimedia learning: Are we asking the right question? Educational

Ockey, G. T. (2007). Construct implications of including still image in tests. Language Testing. 24(4) 517-537.

Schrum, J. L. & Glisan, E. W. (2000). Teacher's handbook: Contextualized language instruction. (2nd ed.) Boston, MA: Heinle and Heinle.

Stempleski, S. (1994). Earth watch. [Video cassette]. America: Prentice Hall Regents.