

The Use of Audio Media vs. Audio-Visual Media in Teaching Listening

Ayu Nindiyana

English Department, Language and Arts Faculty, Universitas Negeri Surabaya

ayunindiyana@mhs.unesa.ac.id

Abstrak

Mendengarkan adalah aktifitas menerima informasi dari pembicara, menginterpretasikan maknanya, dan memberikan respon. Dalam aktivitas mendengarkan, ada dua macam media yang umumnya digunakan, media audio yang hanya terdiri dari audio dan media audio visual yang terdiri dari audio dan visual. Penelitian ini bertujuan membandingkan manakah yang lebih efektif untuk meningkatkan pemahaman siswa, media audio atau audio visual media. Penelitian ini menggunakan metode kuantitatif dengan desain kuasi-eksperimental. Penelitian dilaksanakan di sekolah menengah kejuruan negeri terhadap dua kelas dari kelas 10. Peneliti menggunakan tes (*pre-test* dan *post-test*) untuk mengumpulkan data. Hasil penelitian menunjukkan bahwa terdapat perbedaan antara media audio dan media audio visual. Nilai asymptotic significance yaitu $.012 < .05$ dengan nilai median media audio yaitu 68.00 dan media audio visual yaitu 74.00. Hal ini menunjukkan penggunaan media audio visual lebih efektif daripada media audio.

Kata Kunci: Mendengarkan. Media Audio, Media Audio-Visual.

Abstract

Listening is the activity of receiving the information from the speaker, interpreting the meaning, and giving responds. In listening activity, there are two media that are commonly used, audio media which provides audio only and audio-visual media which provides audio and visual. This research is to compare which is more effective to improve students' understanding, audio media or audio-visual media. This research used quantitative method with quasi-experimental design. It conducted in one of public vocational school with two classes of tenth. The researcher used test (*pre-test* and *post-test*) to collect the data. The result of the research showed that there was difference between audio media and audio-visual media. The asymptotic significance of *post-test* was $.012 < .05$ with the median of audio media was 68.00 and audio-visual media was 74.00. It meant that the mean of audio-visual media was higher than audio media.

Keywords: Listening, Audio Media, Audio-Visual Media.

INTRODUCTION

Listening becomes the input of speaking to respond the listening, so there will be no speaking without any listening process (Rost, 2002). Therefore, listening cannot be separated from our daily life. However, McKeating (1992) argued that listening is a neglected skill in pedagogical process and being ignored by the teachers.

According to Wilson (2008), there are some listening sources or media that can be used, two of them are in the form of audio and audio-visual. In education, media is used as a medium in transferring the information in order that the material is more interesting and enjoyable (Thomas, 1998). It cannot be denied that media helps the students to understand the material easier. Besides, it can encourage the students in the learning process.

Furthermore, the example of audio media is radio. Radio can stimulate someone to visualize the word they hear from the radio. As stated in Wong (2016), radio can stimulate students' imagination by hearing the word. While, the example of audio-visual is film. Wong (2016) also pointed out that "Watching film is very important as it increases their visual and critical awareness." It means that the use of media in the classroom is effective to improve students' comprehensive.

Moreover, a previous study found that the use of audio visual media is effective for the learning process (Rasul, et. Al., 2011) and another also found that audio visual media gives a positive effect on the creativity levels of children (Yazar and Arifoglu, 2012). In addition, Safranji (2014) found that movie can be an effective way for

students to improve their listening ability. It means that media is useful for developing students' knowledge.

In addition, a previous study investigating the use of audio vs. audio-visual in teaching vocabulary found that the use of audio-visual or video influenced vocabulary of the students better than audio material (Bal-Gezegin, 2014). The similar study by Cahyaningrum (2010) found that the use of video is effective in teaching listening than audio-only. It may be different from a study by Coniam (2000) which found that the result of the use of audio media is higher than audio-visual media in listening test.

In fact, there is the difference between the finding of those researchers (Bal-Gezegin, 2014; Coniam, 2000; Rasul, et al., 2011; Yazar and Arifoglu, 2012; Safranj, 2014; Cahyaningrum, 2010). However, it still remains unclear which is more effective media for listening, audio or audio-visual media, since there are still different results.

Therefore, the research which investigates 'the use of audio vs audio-visual media in teaching listening is to ensure which is more influential in listening, audio or audio-visual media'. Besides, it will try to find the practical significance of the difference between audio and audio-visual media to ensure the result of the difference. The researcher tries to find how significant is the difference between audio vs audio-visual media on students' listening comprehension. Based on the background of study above, that research questions are formulated as follows, "Do students who are taught by using audio media have different listening comprehension from those who are taught by using audio-visual media?"

RESEARCH METHOD

This research tried to find the difference between the use of audio media and audio-visual media in teaching listening. The method used in this research was quantitative method. Quasi-experimental design was used as the design of the research because this research manipulates the independent variable but the subjects are not randomly assigned to treatment group and it is not fully control (Ary, et al., 2010). As stated in Ary, et al. (2010), there are two specific design in quasi-experimental design, those are nonrandomized control group, pretest–posttest design and counterbalanced design. The researcher used nonrandomized control group, pretest-posttest design in which the treatment was only given to the experimental group. There was no requirement for determining the experimental group and control group. Pretest was given to both of groups before the treatment was given (Ary, et al., 2010).

Figure 1. Nonrandomized control group, pretest-posttest design (Ary, et. al., 2010)

Group	Pretest	Independent Variable	Posttest
E	Y_1	X	Y_2
C	Y_1	—	Y_2

The sample of the research was two different classes in tenth grade, group A and group B. Group A was taught and tested using audio media or called as control group. Group B was taught and tested using audio-visual media or called as experimental group. These samples were chosen from the population. The population of this research was tenth grade of a public vocational school in Jombang. There were 16 classes in the tenth grade. Each class had different number of the students those were about 35 to 36 students in a class. The total of the population was 612 students. the researcher used cluster sampling to determine the sample. Cluster sampling is randomly selects a class or group to be the subjects of the research (Dornyei, 2007; Ary, et al., 2010). In addition, there had no difference between these two classes after tested using pre-test. The result of pre-test was also analyzed using SPSS. This meant that they had similar proficiency level. This similarity supported the accuracy of difference between the group who was given treatment using audio and the group who used audio-visual. The total of the sample was 70 students. Control Group (Group A) was 35 students and experimental group (Group B) was 35 students.

This research was conducted in three classes of a reputable public vocational high school. The school was located in Jombang, East Java. The time of obtaining the data was conducted during the teaching learning process of English lesson within four days on March to April. Each group was treated in different time. They were offered 3 hours of English class per week in which every hour was for about 45 minutes.

Before the researcher started to examine the subjects, the researcher examined the test that had been made by the researcher to other matched subjects, in this case, the matched subjects which was in the same grade of the subject to know the validity and reliability of the test. Besides, the researcher asked other people in education field, in this case, teacher to check face validity of the test. Those two activities are done to fulfill the principle of constructing a test.

During the experiment, there were two groups which were examined, audio group and audio-visual group. Both of groups were given pretest before the treatment using audio media. Then, Audio group (Group A) was given treatment using audio while audio-visual group (Group B) was given the treatment using video media for listening. For post-test, Group A was tested using audio media and Group B was tested using audio-visual.

In this research, the researcher used test as the instrument to answer the research question because it tried to compare the difference between the use of audio media and audio-visual media. The test was consisted of 6 multiple choice questions and an essay. The researcher also computed the validity and reliability of the test. the result found that the test was reliable with the value of Cronbach’s Alpha was .757 for multiple choice questions and the value of the reliability of essay question using intraclass correlation coefficient (ICC) was .935. Furthermore, the test was also valid. The result of validity test for multiple choice questions were .849; .675; .567; .475; .590; .866 while the result of validity for essay question were .830; .807; .733; .846; .833. The researcher also computed the item analysis, item difficulty and index of discrimination, of the test. The result of item difficulty was .45; .42; .48; .67; .57; .54 which was categorized to moderate difficulty. The result of index discrimination was .81 (excellent); .62 (good); .5 (good); .37 (satisfactory); .62 (good); .75 (excellent).

As the result of the reliability and validity, the test could be used as the instrument of the research. After gaining the data, the researcher analyzed the data using Mann-Whitney test in SPSS because the result of normality test found that the data was not normally distributed for pre-test and post-test. Moreover, the researcher also computed the practical significance of the data to know whether the difference between two group is strength or not in practice. Practical significance can be computed using effect size of Cohen’s d in Ary et al. (2010). Cohen’s d is calculated by subtracting the mean both of the group then divided by the sum of the standard deviation of both groups:

RESULT

The Result of Pre-test Score

Before calculating pre-test using SPSS, the researcher calculated normality test of the data to know whether the data normally distributed or not. If the data was normally distributed, it could be analyzed using parametric test. If the data was not normally distributed, it used non-parametric test (Dornyei, 2007). The result found that the data was not normally distributed. So, this research used Mann-Whitney test to analyze the data as the alternative. The result was presented on the table below.

Table 1. Test of Normality of Pre-test

	Group	Shapiro-Wilk		
		Statistic	df	Sig.
Pre-test	Pre-test Group A	.881	35	.001
	Pre-test Group B	.890	35	.002

Based on the table above, the result found that the data was not normally distributed. P value of group A was .001, while group B was .002. The data was normally distributed

if the significance value is more than .05. The significance level of both of the groups were less than .05 ($p < .05$). So, this research was used Mann-Whitney test because the data was not normally distributed.

After calculating the normality of pre-test, the researcher analyzed the score of pre-test using Mann-Whitney test in SPSS to know the ability between the research subjects. The result of Mann-Whitney test was figured out on the table below.

Table 2. Mann-Whitney test of pre-test

Mann-Whitney U	591.500
Wilcoxon W	1221.500
Z	-.248
Asymp. Sig. (2-tailed)	.804

Based on the result above, the value of asymptotic significance (2-tailed) was .804 which was more than .05 ($.804 > .05$). So, it could be concluded that there was no difference between those two group. Therefore, the ability of those two groups was similar. This similarity showed that both of the group could be used as the research subject and it would support the accuracy of the result.

The Result of Post-test Score

After calculating pre-test using Mann-Whitney test, the researcher also computed post-test score using SPSS to compare the group who was taught using audio media and audio-visual media after being given the treatment. The result of normality test showed that the data was not normally distributed. The result was presented on the table below.

Table 3. Test of Normality of Post-test

	Group	Shapiro-Wilk		
		Statistic	Df	Sig.
Post-test	Post-test Group A	.933	35	.035
	Post-test Group B	.937	35	.044

Based on the table above, the significance value of Group A was .035 which was less than .05, while Group B was .044. Therefore, this research used Mann-Whitney test to analyze the data.

After calculating the normality of the data, the researcher analyzed post-test score using Mann-Whitney. The data was submitted to SPSS. The result of post-test was figured out on the table below.

Table 4. Mann Whitney test of post-test

Mann-Whitney U	398.500
Wilcoxon W	1028.500
Z	-2.520
Asymp. Sig. (2-tailed)	.012

Based on the table 4 above, the result of post-test showed that there was difference between the group who was taught using audio-media and the group who was taught using audio-visual media. The asymptotic sig. (2-

tailed) of post-test was .012. It was less than .05 (.012 < .05).

Table 5. Median, Mean, and Standard Deviation

	Group A	Group B
Median	68.00	74.00
Mean	68.83	74.83
Standard Deviation	9.034	10.054

Based on the table 5, the median of Group A was 68.00, while the mean of Group B was 74.00. So, those two groups were different in which Group B who was taught using audio-visual media was higher than Group A who was taught using audio media. This difference showed that there was influence in the use of audio-visual media in listening activity.

Besides, the researcher also calculated the effect size of post-test to know the magnitude of the difference between the group who was taught using audio media and audio-visual media using Cohen's *d*. Cohen's *d* was calculated using mean of the first group subtracts to the mean of second group and dividing by the pooled of standard deviation of both of the groups. The mean of the Group A was 68.83 and the mean of Group B was 74.83. Standard deviation of Group A was 9.034, while Group B was 10.054. The result showed that *d* value was .314 which meant that the magnitude was small.

DISCUSSION

The result proved that audio-visual media was more effective than audio media. This result also supported the theory and previous studies of the effectiveness of audio-visual media in improving students' understanding in listening activity. As stated in Wang (2014), audio-visual media can enrich classroom activities, motivate them, and help to hold their attention in the classroom.

The students who were taught using audio-visual media showed higher score than the students who were taught using audio media. It can be seen that media facilitates the students to learn more effectively and make students more interested in pedagogical process. Besides, media can be used in enhancing students' desire and motivation in order that the students can be encouraged in listening activity. Media makes the pedagogical process more interesting and interactive (Margono, 2010). Furthermore, audio-visual media can be alternative for listening activity in order that the students can improve their ability in listening. In addition, the use of audio-visual media is to make the students can understand the content of the recording easier. As stated in Wagner (2007), visual information can help the listener in observing the situation and the participant in the material. Buck (2001) added that visual item takes important role in listening activity which can support the learner in comprehending the material. Furthermore, Cakir (2006)

also argued the students can see on the facial expression, dress, gesture, posture and on details of the environment to understand the language without hearing it. Therefore, in listening activity, listeners also need non-verbal information, that is visual information, to help and support them in understanding the material. In fact, in daily life, verbal and non-verbal information cannot be separated in which non-verbal information can help the listener to understand what the speaker says.

In conclusion, the result of post-test showed that there was significance difference between those two groups. The score of audio-visual group statistically proved that audio-visual media may be alternative way to enhance students' understanding and motivate them in listening activity. Practically, the result found that the difference between those two groups was small or weak. Nevertheless, it still could be used as the consideration in choosing the media during the listening activity.

CONCLUSION AND SUGGESTION

Based on the result of the study, it can be concluded that there is significance difference between the group who are taught by using audio and audio-visual media in listening activity. Based on Mann-Whitney test, asymptotic significance was .012 which was less than .05. It meant that there was significance difference between the group who was taught using audio media and audio-visual media. Median of group who was taught using audio media was 68.00 and who was taught using audio-visual was 74.00. The value of median showed that the group who was taught using audio-visual had higher result than the group who was taught using audio media.

The result of practical difference was .314 which meant that the magnitude of the difference was small. This practical difference could be calculated using the mean of those two group and the standard. The mean of Group A was 68.83 with standard deviation was 9.034, while the mean of Group B was 74.83 with standard deviation was 10.054. Therefore, it can be concluded that there was significance difference between the group who was taught using audio media and audio-visual media with small effect in practical difference.

Based on the result above, the alternative hypothesis (H_a) which was there is difference between the group who are taught using audio media and the group who are taught using audio-visual media was accepted. The null hypothesis (H_0) which was there is no difference between the group who are taught using audio media and the group who are taught using audio-visual media was rejected. It means that audio-visual media is more effective than audio media in listening activity.

In addition, the use of audio-visual media can help the students to understand the content of the listening.

Furthermore, audio-visual media also can be alternative way to teach listening to the students in order that the students are more attracted, interested, and motivated to the learning process.

Furthermore, after analyzing the score of post-test, the researcher gives suggestions and recommendation for English teachers and future researchers. For English teachers, media that is usually used in listening activity is audio media. Audio-visual media can be used as the consideration for the teacher as the effective media that can be used to improve students' understanding in listening activity. Therefore, audio-visual media can be chosen by the teacher to be one of alternative media for listening activity in the classroom. Audio-visual media also can attract students' attention, motivate them, and help them to understand the content of listening easier.

For future researchers, this research may be used as addition information. The future researchers may conduct related topic with different kinds of text, instrument, or levels of students.

REFERENCES

- Ary, Donald. (2010). *Introduction to Research in Education*. USA: Wadsworth
- Bal-Gegezin, Betül. (2014). An Investigation of Using Video Vs. Audio for Teaching Vocabulary. *Procedia - Social and Behavioral Sciences* 143 (2014) 450 – 457
- Buck, Gery. (2001). *Assessing Listening*. UK: Cambridge University Press
- Cahyaningrum, Dewi. (2010). *The Effectiveness of Using Video in Teaching Listening of Oral Narrative Text*. Sebelas Maret University
- ÇAKIR, Dr. İsmail. (2006). The Use of Video as an Audio-Visual Material in Foreign Language Teaching Classroom. *The Turkish Online Journal of Educational Technology – TOJET* October 2006 ISSN: 1303-6521 volume 5 Issue 4 Article 9
- Coniam, David. (2000). The Use of Audio or Video Comprehension as an Assessment Instrument in the Certification of English Language Teachers: A Case Study. *SYSTEM*, Vol. 27, No. 1, 1-16.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford University Press.
- Margono. (2010). *The Effectiveness of Teaching English Verbs by Using Cartoon Film*. Final Project. Semarang.
- McKeating, Douglas. (1992). *The Teaching of English as an International Language: A Practical Guide*. Collins: Glasglow and London
- Rasul, Saima, et al. (2011). A study to analyze the effectiveness of audio visual aids in teaching learning process at university level. *Procedia - Social and Behavioral Sciences* 28 (2011) 78 – 81
- Rost, M. (2011). *Teaching and researching: Listening*. UK: Pearson Educational Limited.
- Safranjan, Jelisaveta. (2014). Advancing Listening Comprehension Through Movies. *Procedia - Social and Behavioral Sciences* 191 (2015) 169 – 173
- Thomas, C.R (1998). *The Impact of Media and Technology in Schools*. Georgia: Research Report, Retrieved from it.coe.uge.edu/9treeves.pdf July, 31/13.
- Wagner, Elvis. (2007). Are They Watching? Test-Taker Viewing Behavior During an L2 Video Listening Test. *Language Learning & Technology* Volume 11, Number 1 pp. 67-86
- Wang, Y. (2004). English magazines, motivation+ improved EFL writing skill. *English Teaching Forum*, 54, 142-158.
- Wilson, J. J. (2008). *How to Teach Listening*. England: Pearson Educational Limited.
- Wong, Jennifer. (2016). *Printed and Audio-Visual Media: Can We Use It in Teaching English?*. Multimedia University, Malaysia
- Yazar, Tarik & Arifoglu, Gokce. (2012). A research of audio visual educational aids on the creativity levels of 4-14 years old children as a process in primary education. *Procedia - Social and Behavioral Sciences* 51 (2012) 301 – 306