The Use of Bimodal Subtitling in English Movie to Increase Students’ Vocabulary Mastery

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Abstract (Bahasa Inggris)
The aim of this research was to investigate whether the use of bimodal subtitling in English movies can increase students’ vocabulary mastery. This research used quantitative method in the form of pre-experimental research design with one group pre-test and post-test. The subjects of this research were 16 students of class X TLM 2 of SMK Teknologi Muhammadiyah Limboto in the 2022/2023 academic year. This research used purposive sampling. The technique of collecting data was used as a vocabulary test as the instrument of this research. The data was analyzed by using paired sample t-test calculations with the help of SPSS program 23 version. The outcome demonstrated a statistically significant increase in the students’ mean score between the pretest and posttest with a significant level of α=0.05. The result showed the value of Sig. (2-tailed) was 0.000 lower than <0.05, which means H₀ was rejected and H₁ was accepted. Therefore, it can be stated that there was an influence of the use of bimodal subtitling in English movies to increase students’ vocabulary mastery.

Abstract (Bahasa Indonesia)
Penelitian ini bertujuan untuk mengetahui apakah penggunaan takarir bimodal dalam film berbahasa Inggris dapat meningkatkan penguasaan kosakata siswa. Penelitian ini menggunakan metode kuantitatif dengan desain pre-experimental design one group pre-test and post-test. Subjek penelitian ini adalah 16 siswa kelas X TLM 2 SMK Teknologi Muhammadiyah Limboto tahun ajaran 2022-2023, ditentukan dengan menggunakan teknik purposive sampling. Data dikumpulkan menggunakan tes kosakata sebagai instrument penelitian ini, dan dianalisis dengan menggunakan perhitungan pair sample t-test dengan bantuan program SPSS versi 23. Hasil penelitian menunjukkan adanya peningkatan yang signifikan secara statistik pada nilai rata-rata siswa antara hasil pre-test dan post-test dengan singkat signifikansi α=0,05. Hasilnya menunjukkan nilai Sig. (2-tailed) = 0,000 lebih kecil dari 0,05, artinya H₀ ditolak dan H₁ diterima. Oleh karena itu, dapat dinyatakan bahwa terdapat pengaruh penggunaan takarir bimodal dalam film berbahasa Inggris terhadap peningkatan penguasaan kosakata siswa.

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1. INTRODUCTION

Vocabulary mastery is the most important thing for students because vocabulary becomes the basic aspect that helps students to master the four language skills. If students have good vocabulary mastery, they are able to understand what they read or hear, speak fluently, and write easily if they have the capability of using the words accurately. Actually, learning new vocabulary is difficult considering the many factors that can influence students. Based on the experience of Teaching Practice II in SMA Negeri 2 Gorontalo, the researcher found that most of the students had big problems with learning English. Students’ difficulty that they often encountered was that they could not understand the meaning of a word, and they still did not understand how to use the word in a sentence. The teacher said that students have problems with understanding words or phrases. It happens because they may lack vocabulary. It made it for students difficult to make a sentence or to make a short conversation.

Several factors could influence the lack of vocabulary mastery for students. The first was in the learning process. Students had difficulty finding out the meaning of those words. They just asked their friends who knew the meaning of those words. The second was students’ difficulty memorizing vocabulary. The third was that students are less in reading. Students are not interested in reading a book. The fourth was that the teacher still used traditional ways to teach students. Use a textbook and let the students find out the meaning of that text or that sentence. It made students feel bored. The teacher use media in the learning process to make the class more interesting. The teacher had a very important role in the learning process. Teachers teaching without new techniques made the learning process monotonous.

Based on the explanation of the problems above, the researcher designed a plan to be used in teaching. Attracting students’ interest in learning English, teachers must use good learning methods that are supported by good learning media as well. Some instructional media can be used by teachers to increase students’ vocabulary mastery. Such as using English movies as the audiovisual medium. Watching English movies can be used as a resource for learning the medium. In addition, students have more interest in watching or seeing things that are real and that does not make students feel bored. Watching English movies gives students more focus and learning English. Meanwhile, in a research article by Arpan (2015), “watching English movies is useful media for students in senior high school. Students can get knowledge that they cannot get in class or in their text-books”. Although English movies are suitable as a medium of learning, movies may also make students confused and do not understand the storyline of the movie. It makes students bored and unfocused. Therefore, students need some help to understand the movie, and that is the function of the subtitles. By watching an English movie with subtitles, students learn some vocabulary and phrases which help students to understand what the movie is talking about. Students watching movies with subtitles for learning foreign languages have shown increases in reading and listening comprehension, word recognition, decoding skills, motivation, and vocabulary acquisition (Etemadi, 2012, p. 239).

Based on the background above, the purpose of this study is to investigate whether the bimodal subtitling in English movies can increase students’ vocabulary at the tenth grade of SMK Teknologi Muhammadiyah Limboto. The main point of this research is vocabulary, particularly in nouns, adjective, and verbs that are provided by English movies.

2. RESEARCH METHOD

This research used a quantitative method. Quantitative method is a method that uses numbers to analyze data and uses one variable to influence other variables (Cresswell, 2014). The researcher used this method to measure the use of watching English movies to enrich students’ vocabulary mastery. The data for this research were the students’ scores on a vocabulary test which indicated their knowledge and skills. In constructing the test, the researcher used two based competence from curriculum K13 that are KD 3 knowledge, and KD 4 skill. The subjects of data were students in senior high school at SMK Teknologi Muhammadiyah Limboto, academic year 2022/2023.

Moreover, this research used independent and dependent variables. According to Sugiyono (2016), the independent variable is a variable that affected, or caused the change, and appears as a dependent variable. The independent variable is bimodal subtitling in English movies. However, Dependent Variable (Y) Dependent variable is the main focus of researchers. This variable is often referred to as the output variable, criteria, consequence or dependent variable. The dependent variable is the variable that “depends” on the independent variables. In this research, the dependent variable is students’ vocabulary mastery.

This research used pre-experimental study with one group pre-test and post-test design. The researcher employed this design to find out the difference between before and after giving treatment, and used bimodal subtitling in English movies as a teaching medium. The pre-experimental method used pre-test, treatment,
and post-test, as well as the experimental procedure with one class of research subject. The students gave a vocabulary test with multiple choices that consisted of 25 numbers.

The technique of data collecting is the strategy of writers to get the data from participants. The writer applied a test to collect the data for this research. In this research, the researcher used test as the instrument of research. The researcher only used a test because in this study applied a pre-experimental study with a one group pre-test and post-test design which only focused on the results of data collection, not on the processed data collection. The type of test was multiple-choice. Students had to answer the questions that consisted of vocabulary, and there were 50 questions that students needed to answer. After getting the result of the valid test, the researcher analyzed the result by using SPSS program 23 to know whether the tests were valid or not. And the number of valid questions was 25. The valid questions are used in the pre-test and post-test, and the invalid questions are deleted.

The validity test is one of the features of the scoring method for measuring the test according to the study. According to Schumacher and McMillan (2001:281) says that test validity is the extent to which inferences and uses made on the basis of instrument are reasonable and appropriate. The validity test is a test of accuracy, known as a try-out test. It is used to measure students' vocabulary levels before taking the actual test. By using the help of SPSS program version 23, the validity of the test was verified using the product moment correlation formula. This test was given to class X ASKEP 1, which was not selected as the sample of this study. There were 50 consisting of 15 nouns, 9 verbs, and 16 adjectives. The reason why the researcher chose nouns, adjectives, and verbs is because they mostly appeared in the movie. Moreover, reliability analysis is found that the instrument is suitable for use as a tool during data collection. According to Schumacher and McMillan (2001:181) says that reliability refers to the consistency of measurement, the extent to which the scores are similar over different forms of the same instrument or occasions of data collection. This test used the Cronbach’s alpha method. The statistical test decision was that if Alpha > 0.60, the item was reliable or consistent. Based on the result of the reliability test in the table above, Cronbach’s alpha number in the test was 0.927. With the result of 0.927>0.60, it obtained at a very high level. Therefore, it can be stated that the test used in this research was consistent and reliable. After conducting a reliability test by using the formula Cronbach’s Alpha with the help of SPSS 23, and taking reliable questions, the researcher applied the test to the research sample and analyzed the data. Additionally, the data analysis is the process of systematically compiling information from participants after doing the test to get the result or finding of this research. In analyzing the data, the researcher used the following formula in scoring the students’ tests. According to Arikunto (2005), the formula is as follows:

\[ S = \frac{R \times 100}{N} \]

Where:
- \( S \) = Score of the test
- \( R \) = Right answer
- \( N \) = Total of the items

After scoring students' outcomes, the researcher calculated and analyzed the data by using a paired t-test with the help of Statistical Package for the Social Sciences or SPSS program 23 version. The aim of the t-test was to find out the difference in students’ vocabulary development between pre-test and post-test. To measure the score of students’ vocabulary mastery, the researcher used the classification for students' scores. The range of score of students’ vocabulary mastery scores into four classified level of students’ vocabulary mastery. In the range 89-100 includes in very good category, range 79-88 include in good category, 70-78 include in enough category, and range <70 include in poor category. Furthermore, the hypothesis verification is a tool used to know the success or failure of this research. The researcher used the significance level \( \alpha = 0.05 \) according to Santoso (2014), the indicators as follows:
- Accepted If the value of Sig. (2-tailed) is lower than <0.05, it means \( \text{Ho} \) was rejected and \( \text{Ha} \) is accepted
- Rejected If the value of Sig. (2-tailed) is bigger than >0.05, it means \( \text{Ho} \) was accepted and \( \text{Ha} \) is rejected.

For the research report, the researcher used the steps specified in this study to present the students' vocabulary results in statistical data. The data displayed the result of each test using SPSS (Statistical Program Social Science) version 23.

3. FINDING AND DISCUSSION

Research Finding
To determine student achievement in vocabulary, student scores were obtained from the pre-test and post-test. The data collection process was obtained by using a vocabulary test instrument consisting of 25 multiple
choice questions. The test was conducted twice at the same level of tenth grade students in SMK Teknologi Muhammadiyah Limboto, which is class X TLM 2, which consisted of 16 students. As the first step of this research, a pre-test is one of the primary data that supports this research. The results of the pre-test data are used to determine students’ initial knowledge before the researcher applies the treatment. After giving the pre-test, the researcher applied the bimodal subtitling in an English movie to teach vocabulary. After the treatment was given, the researcher gave a post-test to the students. The result of post-test is used to see the difference in scores before and after the treatment is applied.

The researcher conducted a pretest to measure students’ vocabulary mastery scores. The pre-test data were gathered to determine students’ previous ability before the researcher taught the vocabulary by using the bimodal subtitling in an English movie. In the pre-test, the test consisted of 25 questions consisting of 10 adjectives, 9 numbers of nouns, and 6 verbs. Based on the table above, the highest score on the pre-test was 68, while the lowest score was 28. The highest score reached by the 3 students, or 18.8%, and the lowest score obtained by 1 student, or 6.3%. In addition, there were 2 students who got scores of 40 (12.5%). There were 2 students who got a score of 52 or 12.5%, and then 1 student who got a score of 56 or 6.3%. There were 5 students who got scores of 60 or 31.3% or, in other words, the majority of the frequency in this range. All students’ pre-test scores were included in the poor category because the highest score in the pre-test was 68, where all students achieved scores less than < 70, which is included in the poor category. Besides, the average pre-test score was 56.25. This data is more clearly explained in the graphic below:

Graphic 4.1

After giving the pre-test, the researcher then gave the treatment. In the first meeting, the researcher entered the class and greeted the students. Then checked the attendance list and explained in advance about the movie to be watched, also what benefits they would get from learning by a movie. The researcher explained what the students had to do while the movie was playing. First, students must focus and pay attention when the movie is playing. They have to watch movies that have bimodal subtitling in them. The movie was displayed twice. The first display is given before students got vocabulary exercises, the second display is given after students got vocabulary exercises. The researcher chose the movie “Harry Potter and the Chamber of Secrets” as the first movie that was used in the first meeting. The researcher chose this series because there was a character “Dobby” the house elf, who became a slave in a wizarding family. This character can attract students’ attention to focus on watching the movie. Second, after the students watched the movie, the researcher divided the students into 4 groups, and the researcher distributed several vocabulary exercises. The researcher asked students to find out the meaning of the questions that were given. In this meeting, there were 2 tasks. Task 1 was students defining the antonym of some words. Task 2 was for students to make a list of words and find out the meaning. Students carry out group discussions while watching the movie. Students collect information or answer from the dictionary or from the internet. After
that, the researcher asked one group to present their answers, and another group checked whether the group’s answers were correct or not. If there was a wrong meaning, then they could see the word in their dictionary or smartphone. The researcher started to play the movie for about 30 minutes.

Second treatment the movie is continued to another scene to watch. Same with the first meeting, the movie was played twice, and students must focus on watching and must read the bimodal subtitles to be able to understand the movie. After watching the movie, the researcher divided the students into 4 groups, the same as the group in the first meeting. The researcher gave some vocabulary builder exercises to students. In this meeting, there were 3 tasks. Task 1 was for students to find out the synonym of words. Task 2 was for students to make a sentence using some words. Task 3 was for students who tried to find the meaning of words. Students must discuss the answers in groups. Tried to look for answers by using their dictionary or smartphone. After that, the researcher and students checked the answers of each group to see whether they were correct or not.

In third treatment, as usual, the researcher started the class by checking the attendance list first. The researcher used another movie with the title “Harry Potter and the Deathly Hallows 1”. After the first and second meetings, the students became curious about the story of the movie, especially about Dobby the house-elf. In this series, it showed the continuation of the story of the previous series. Students were increasingly excited and curious to watch movies. This was a good sign that meant students enjoyed the movie. Students already understood what needed to be done, they focused on watching and paying attention to the appearance of bimodal subtitles in the movie. Some students chose to write new vocabulary and unfamiliar words. After the movie end, students showed their interest in the movie they had watched, such as following the accents and style of speech of several characters in the movie. Sometimes they laugh, and sometimes they feel sad. After that, the researcher divided students into 4 groups, and gave students assignments regarding vocabulary builders. In this meeting, the researcher gave 2 tasks. The task 1 was for students to make a list of any words (verbs, nouns, and adjectives) that were contained in the movie. Students had to make a list starting with letters A to Z. The task 2 students matched the words with their Indonesian equivalents. Students use a dictionary and their smartphones to find out the answers to the questions. After that, the researcher asked one group to present the results of their group’s work. The other groups paid attention and checked whether the group’s answers were correct or not. If there was a wrong meaning, then they could look up the word in their dictionary or smartphone again.

In the last treatment, the class started by checking the attendance list, and the movie was continued for another scene to watch. Students must pay attention and read the bimodal subtitling while they are watching the movie. After that, the researcher gave students vocabulary builder exercises. In this meeting there were 2 tasks. Task 1 was for students to find the English equivalents for the Indonesian words. The students were given the dashed and some letters of English words as clues. Task 2 was for students to find out the meaning of some words. After they got the answer, the researcher checked whether each group’s answers were correct or not.

After doing the treatment, the researcher was given the post-test for students. The post-test aims to know whether the applying of bimodal subtitling in English movie can enrich students’ vocabulary mastery or not. In this post-test, we used 25 numbers of question in a multiple choice form. These questions consisted of 10 adjectives, 9 nouns, and 6 verbs. Based on the result of test, the highest score was 96, which was in a very good category. The lowest score was 80, which was in a good category. The highest score reached by the 5 students, or 31.3%, and the lowest score obtained by 1 student, or 6.3%. In addition, there were 6 students who got scores of 88 or 37.5% or, in other words, the majority of the frequency in this range, and they were in a good category. Then, there were 4 students who got scores of 92 or 25%, and were included in a very good category. Besides, the average post-test score was 91. This data is more clearly explained in the graphic below:
Based on the graphic above, it shows that there was an increase in students’ scores after the researcher gave them the treatment by using bimodal subtitling in an English movie. It can be seen that the students’ post-test scores are higher than in the pre-test. Therefore, it proved that there was an increase in the scores of students’ scores in the post-test because most of the students' scores of 88 and 96, and the lower score in the post-test was only 1 student who got a score of 80.

Graphic 4.3
Indicator of Vocabularies between Pre-test and Post-test

The chart above shows the increase in students’ vocabulary mastery and shows each indicator. Based on the graphic above, the result of the pre-test and post-test adjective indicators showed that the total scores of students who answered correctly increased from 96 (60%) to 154 (96.25%). It indicated students understood adjective vocabulary very well after the researcher taught the students by using bimodal subtitle from an English movie. Meanwhile, in noun aspect, there was a high increase from 79 (54.86%) to 128 (88.89%), and the different range of scores for pre-test and post-test in noun was 34.03%. The last indicator was a verb. It can be seen there was a very high increase from the score of pre-test 50 (52.08%) to post-test.
82 (85.42%). Therefore, it has seen a very high increase in indicator verbs. Thus, the researcher can conclude that by using bimodal subtitling in English movies can enrich students' vocabulary mastery. Additionally, the researcher used normality test to see whether the data distribution is normally distributed or not. This test is carried out with the aim of assessing the distribution of data in a group of data or variables. This research used the SPSS version 23 software for this normality test and Shapiro-Wilk test. The criteria for identifying normality using the Shapiro-Wilk test are as follows:
If Sig > 0.05, then the data is normally distributed.
If Sig < 0.05, then the data is not normally distributed.

Based on the results of the SPSS version 23 programs showed that the pre-test and post-test data were normally distributed. This is known from the normality test case determined using the Shapiro-Wilk method, that if p > 0.05 this indicated that the data was considered normally distributed. Based on the data above, the pre-test significance value was 0.015 > 0.05 and the post-test significance value was 0.014 > 0.05. Therefore, it can be assumed that the pre-test and post-test results were normally distributed. Moreover, in this research used paired sample t-tests with the help of SPSS program version 23. The paired sample t-test is used to analyze the hypothesis regarding the correlation between the independent variable and the dependent variable. The t-test is used to prove the hypothesis. Hypothesis was used to test temporary conjectures in this research. The use of bimodal subtitling in English movies to increase students’ vocabulary mastery has been analyzed by using a t-test to see whether this method has an effect on vocabulary knowledge.

In the result, the pre-test mean score was 56.25, while the post-test mean score was 91.00. The standard deviation value of the pre-test was 11.45, and the standard deviation value of the post-test was 4.502. Based on the Paired Samples T-test, the value of Sig. (2-tailed) was 0.000 lower than < 0.05, it means H₀ was rejected and H₁ was accepted. Therefore, it can be assumed that there was an influence of the use of bimodal subtitling in English movies to increase students’ vocabulary mastery.

**Discussion**

Based on data result in the pre-test, the researcher found that the level of students’ vocabulary acquisition was in the poor category. That can be proved from the average score of the students in the pre-test was 56.25. Therefore, the researcher applied a method that can help students in the learning process. A method that could have a good effect on students’ vocabulary acquisition is by using bimodal subtitling in English movie. Watching English movies with bimodal subtitling in it could help students to improve their vocabulary mastery easily at times during the learning process. It was followed by (Hoogendyk, Arifin, & Novita, 2014) that using bimodal subtitling was effective in increasing students’ vocabulary. It could have a pretty good impact on students’ vocabulary mastery, and could motivate students in English lessons. During the research, on the implementation of bimodal subtitling in English movies as the learning medium in teaching, the researcher was played the movie twice. The first was given before students got the vocabulary exercises, and the second was given after students got the vocabulary exercises. This step is to be done in order that students can understand the storyline of the movie that they have watched. By playing the movie twice, it made it easier for students to watch, and to get more vocabulary through the help of display of bimodal subtitling. There is a line (Koolstra & Bentjes, 1999) stating that learning vocabulary from movies, students have to watch it with high frequency. The subtitled movie could have an impact on vocabulary acquisition if the learners watch the movie more than once. Thus, the researcher played the movie and repeated the movie twice.

In doing the treatment by using bimodal subtitling in an English movie, the students got interested in watching the movie. This happened after the first meeting. Students got curious about the story and the ending of the movie. According to King (2002), subtitles can help students to follow the plot of a movie easily, and can increase students' concentration for the next dialogues. The benefit of using bimodal subtitling researchers get during the application of treatments. The use of bimodal subtitling made students’ vocabulary increase because using bimodal subtitling in English increases, students have a good understanding of learning vocabulary. Students can learn to build a text in a foreign language quickly and increase their speed in reading by following the bimodal subtitles and subtitles in the dialogue of the movie. Furthermore, in giving treatment to students, the researcher found several problems. First, the researcher had difficulty with preparing the materials, it is in line (Kanellopoulou, 2019) stated that preparing materials for the classroom can also be quite time-consuming for the teacher. The school only had one LCD projector, and at that time another class was also using the device. Because of this, researchers were having trouble finding another LCD projector. Luckily, there was one teacher who personally had an LCD projector, and the
researcher could use it. Although the researcher took a lot of time to get the LCD projector, the researcher can use it and continue to provide treatment to the students. Second, at first, the students were very interested in learning to use movie media with bimodal subtitling in it. However, after the movie was played and lasted for 15 to 20 minutes, the students started to feel bored. They started to do other things that made them not focus on watching movies. One of them took their smartphone and started to focus on playing with the smartphone.

Therefore, in the second meeting, the researcher decided to cut the duration of the movie to around 20 minutes, and students began to enjoy themselves and focus on watching the movie. Finally, when the researcher asked about the students’ vocabulary mastery, they said that they had deficiencies in English vocabulary mastery. The researcher asked the students to mention the vocabulary of adjectives, nouns, and verbs. They only mentioned a few vocabulary words for each indicator and almost all students mentioned the same vocabulary. As for adjective vocabulary, they mentioned “happy, sad, crazy, and hungry”, for noun vocabulary they mentioned “book, table, bag, smartphone, pen”, and for verb vocabulary they only mentioned “eat, drink, sing, and read”. Therefore, in answering some of the statements that were given, the researcher asked students to use their dictionary or their smartphone to help them get the answers to the questions.

The use of bimodal subtitling in English movies can increase students’ vocabulary mastery and is expected to get a good result in the teaching and learning process. According to (Hoogendyk, Arifin, & Novita, 2014), bimodal subtitling is useful for students to get knowledge of increasing students’ vocabulary, because it is easy to make them understand. Bimodal subtitling in English movies can attract students’ interest and focus on learning English. In this research, the researcher assumed that this research was successful. It has been proved that applying this method could give a good effect on students’ vocabulary ability. It can be seen from the average score of the students’ pre-test was 56.25, which was categorized as “poor”, while the post-test was 91, which was categorized as “very good”. This showed the average pre-test and post-test scores increased by 34.75 points. It can be concluded that there was a significant difference in scores between the pre-test and post-test. In addition, the value of Sig. (2-tailed) of this research was 0.00 lower than < 0.05, so it can be concluded that there was a significant difference in students’ scores for class X TLM 2 SMK Teknologi Muhammadiyah Limboto. These data results answered the research question, that is, the use of bimodal subtitling in English movie can increase students’ vocabulary mastery.

4. CONCLUSION

Vocabulary is one of the language components that support students' success in mastering a language. Actually, learning new vocabulary is difficult considering the many factors that can influence students, such as spelling, pronunciation, length, and connotation. To help to increase students’ vocabulary mastery, the researcher used bimodal subtitling in a movie in English. This method has a positive effect on students’ vocabulary acquisition. By using bimodal subtitling in English movies as teaching media the students can get more vocabulary easily. This can be seen from the students' outcomes in pre-test and post-test in this research. In the pre-test, the higher score was 68, and all the students' scores for the pre-test achieved less than <70. Thus, it can be stated that students' scores in the pre-test were the category of the poor. Besides, the score of students' post-test got in “very good” categorized. The higher score was 96, and there were 5 students who got a score of 96. This showed the difference in the scores for pre-test and post-test was increased. In conclusion, there was a significant difference in scores between the pre-test and post-test. In addition, the value of Sig.2 (tailed) of this research was 0.000. It means lower than <0.05. Therefore, these data results answered the research question of this research, which is that the use bimodal subtitling in English movies can increase students’ vocabulary mastery.
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