

## EFFORTS TO IMPROVE CRITICAL THINKING BY USING AUDIO-VISUAL MEDIA

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This study aims to determine the audio-visual media in learning to write argumentative texts the pros and cons and to find out the impact of increasing students' critical thinking skills. The research method used is the mix method (mix). This research was conducted at SMK Garuda Nusantara Cikarang with a sample of class X TKR 1 as the experimental group and class X TKJ as the control group. The instruments used in this study were tests in the form of question sheets, observation sheets, and attitude scale questionnaires, as a support for the implementation of learning the application of audio visual media in learning to write argumentative texts for and against their impact on increasing students' critical thinking skills. The instrument is categorized as valid and reliable after being analyzed by expert judgment and statistical tests (validity and reliability). The calculation of this research is through the class average test of pretest and posttest, the number of posttest and posttest scores, knowing the maximum and minimum scores, and test the hypothesis with the paired sample T-Test. The results showed that the activity of students had increased with an average pretest score of 48.88, and an average posttest of 81.00. The impact on increasing students' critical thinking skills after the application of audio-visual media is in accordance with the results of the gain hypothesis test, namely the probability value of Sig. (2-tailed)  $0.00 < 0.05$ . The magnitude of the impact on increasing critical thinking skills is shown by the results of hypothesis testing which states that there are differences in the data from the pretest and posttest results so that there is an increase in learning by looking at the average of each activity. Thus, audio-visual media can be used as an alternative learning media that is used to improve students' critical thinking skills in learning to write pro and con arguments.

Keywords: Critical Thinking, Audio Visual, Writing Argumentative Texts

### 1. INTRODUCTION

The large amount of learning material that exists now often makes the learners themselves not find the meaning of the learning itself. Learning is widely accepted as something rote in nature. Because learning is absorbed by rote memorization, the knowledge itself does not last long to settle on a person who learns. Learning seems to be as if it were just a formality. In order for learners to truly experience the learning process and know the core points of learning, critical thinking skills are needed. The ability to think critically is needed in order to help learners in managing the mind to obtain appropriate ways of learning, knowing the meaning of learning and knowing the core points of learning. Along with the rapid development of the information age and increasingly complex life, critical thinking skills are seen as a basic competency that is indispensable to master as well as reading and writing (Fisher, A., 2019).

Talking about reading and writing, this time the author tries to build and explore problems related to writing activities using audio-visual media in an effort to build critical thinking. Writing activities can be applied in any form, for example, writing stories, diaries, letters, report texts, and writing argument texts. The author tries to formulate related efforts to improve critical thinking using audio-visual with argument writing activities. Why this needs to be done, according to the author's point of view that writing activities are not young if done diligently, sometimes someone has difficulty getting started in writing and difficulty in expressing ideas. Likewise, according to (Alwasilah, 2017) states, that students have no courage to write for fear of being wrong and being laughed at by people.



Meanwhile, according to Zainurrahman (2011: 217) one of the difficulties of writing is lack or run out of ideas. When we lack ideas, or even run out of ideas then we tend to be lazy to continue our writing process, because we always think "What should we write again?" and if this happens, we tend to choose two unintelligent alternatives; First, we will choose to finish our writing there. Secondly, we will stop writing and we claim that we failed. From this point, the author tries to raise a problem that exists in the author's activities to improve critical thinking through audio-visual media. As a step and effort to build critical thinking through audio-visual media. The writing activity this time is focused on argumentation writing oriented towards the pros and cons. The author thinks that writing arguments is not easy for the media to stimulate the mind so that it gives rise to new ideas or ideas.

The author tries to explore or seek to improve thinking through audio-visual media. The use of learning media in the teaching and learning process can arouse new desires and interests, increase motivation and stimulation of learning activities, and even bring psychological influences on students (Arsyad, 2014: 19). In addition to generating students' motivation and interest, learning media can also help students improve understanding, present data attractively and trustedly, facilitate data interpretation and condense information. Learning media as a tool in the learning process is a reality that cannot be denied its existence, because the existence of learning media can facilitate educators in the learning process are conveying messages or learning materials to a person or his students. Each learning material has varying degrees of difficulty. On the one hand, there are learning materials that do not require learning media, but on the other hand there are learning materials that require learning media such as writing activities in the 2013 kurukukulum, especially Indonesian subjects. Based on the description above, it can be concluded that the benefits of learning media are learning resources used by educators in learning in the hope of streamlining the course of learning to be more effective and efficient.

## 2. METHOD

The research method that will be used in this study is a mixed method (Mixed Method) type The Embedded Design (Insertor). Mixed method (Mixed Method) type of insertion (Embedded Design) is a research method that is a reinforcement only of the research process that uses a single method (qualitative or quantitative) because in the insertion method (Embedded Design) researchers only do mixed (mixed) in the section with a qualitative approach to research with quantitative characteristics. And vice versa. Insertion is carried out on parts that do require approval or affirmation, so that the resulting conclusions have a better level of confidence in understanding Craswell (Indrawan and Yaniawati, 2014: 84).

The quantitative approach used is an experimental approach with quasi-experimental design. In this design, there is an experimental group and control groups. The experimental group was given learning treatment with audio-visual media (X), as well as the control group with learning not using audio-visual media carried out in schools, then each group was given pretests and postes (O). Experimental research using two groups to see the difference in students' critical thinking improvement between the experimental class and the control class, in addition to comparing the ability to write argumentation texts pro and con experimental class students who use audio-visual media with control classes that do not use audio-visual media.

The qualitative approach that will be used is descriptive research. Descriptive qualitative in this study is used to describe the application of learning to write argumentation texts pro and con using audio-visual media. The data collection technique to be used is observation with the same data source.

The population in this study was all class X students of SMK Garuda Nusantara for the 2021/2022 academic year spread across six classes totaling 180 students. Furthermore, the sample is as part of the population, as an example taken using means. In this case, sampling is carried out using purposive sampling techniques, then classes X TKJ and X TKR 1 are taken, because the two classes have the same academic ability. After obtaining two sample classes, the experimental class and control class were determined, which in the end determined class X TKJ as the control class and class X TKR 1 as the experimental class.



### 3. RESULTS AND DISCUSSION

#### 3.1 Validity and Reliability Test

The validity test used is a content validity test using the opinions of experts (Expert Judgment). This Judgment Experiment is used to find out to what extent the instrument is relevant and can represent the intended. Internal reliability tests can be tested by analyzing the consistency of the evidence in the instrument. This is done by researchers by analyzing by judgment, so that the question items can be consistent and accountable.

Table 1. Recapitulation of Instrument Validity and Reliability Test Results

Variable	No Item	Validity coefficient	Tipping Point	Conclusion
Writing Ability	1	0.796	0.300	Valid
	2	0.771	0.300	Valid
	3	0.617	0.300	Valid
	4	0.699	0.300	Valid
	5	0.688	0.300	Valid
Reliability Coefficient			0.756	
Tipping Point			0.700	
Result			Reliabel	

Based on the recapitulation of the validity test results above, it is known that the proposed validity coefficient value has a validity coefficient value above the critical point of 0.3 which indicates that the measuring instrument used has performed its measuring function, in other words, it has been declared valid. And from the results of testing the reliability of the instrument, the value of the reliability coefficient of  $0.756 > 0.7$  was obtained, which shows that the measuring instrument used has shown its consistency.

#### 3.2 Quantitative Data Analysis

Data analysis in this study is used to recap the results of student worksheets that occur during the learning process, the format of student worksheets in the learning process used is a structured sheet format. The format of the worksheet is in the form of predetermined questions in learning to write argumentation texts by applying audio-visual media to improve critical thinking. The focus of the worksheet on student activities is the extent of students' response and understanding of the questions given to learning activities using audio-visual media, as well as the extent of students' ability to write argumentation texts. Pretests are carried out to determine the understanding of students during the learning process. The following are the results of quantitative data analysis.

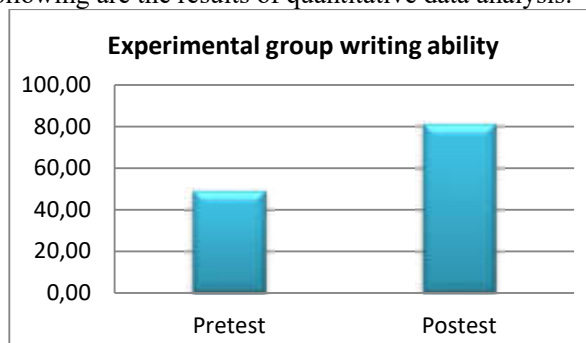


Figure 1. Average Scores and Standard Deviations for Students' Writing Ability Given Audio Visual Media Before and After Being Given Treatment

The figure above explains the average writing ability of students who were given audio-visual media before being given treatment of 48.88, lower when compared to the writing ability of students after being given treatment of 81. It can be concluded that the use of audio-visual media has a great impact on the learning process of writing argumentation texts.

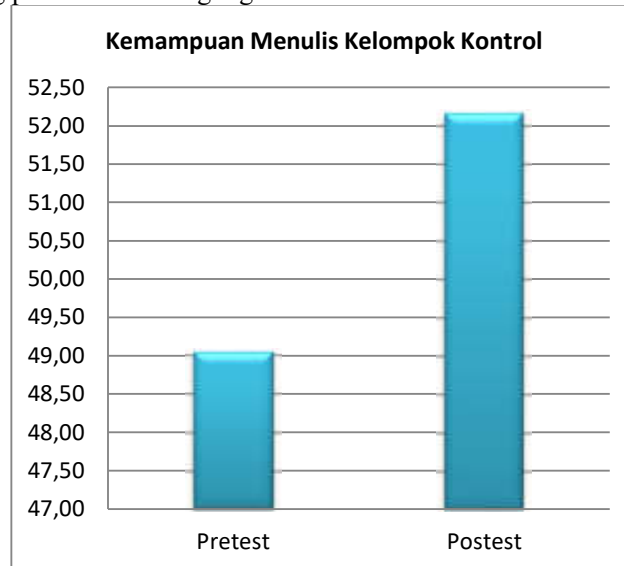


Figure 2. Average Scores and Standard Deviations for Writing Ability of Learners Who Were Not Given Audio Visual Media Before and After Being Given Treatment

Figure 2 above explains the average writing ability of students who were not given audio-visual media before being given treatment of 49.04, lower when compared to the writing ability of students after being given treatment of 52.16. However, the differences between the two results do not differ much. It can be concluded that the control group that is not given by the media or in your word using conventional methods does not occur significant changes.

### 3.3 Comparison of Critical Thinking Ability Between Learners Who Use Audio visual and Those Who Do Not Use Audio visual

From the results of the study, it is known that the average score of critical thinking ability in students who use audio-visual is 74.82, higher when compared to the group of students who do not use audio-visual of 66.36. From the results of the comparison test, it is known that the t-count value is  $2.296 > t\text{-table } 2.021$ . So it can be concluded that there is a significant difference in critical thinking ability between students who use audio-visual and those who do not use audio-visual. In other words, the thinking ability of students who use audio-visual is better when compared to students who do not use audio-visual.

### 3.4 Comparison of Early Writing Ability Between Learners Who Use Audio visual and Those Who Do Not Use Audio visual

From the results of the study, it is known that the average score of initial writing ability in students who use audio-visual is 48.88, higher when compared to the group of students who do not use audio-visual of 49.04. From the results of the comparison test, it is known that the t-count value is  $-0.076 < t\text{-table } 2.021$ . So it can be concluded that there is no significant difference in initial writing ability between students who use audio-visual and those who do not use audio-visual. In other words, it can be said that students have the same writing ability between students who use audio-visual and students who do not use audio-visual.

### 3.5 Comparison of Writing Ability Between Learners Who Use Audio Visual and Those Who Do Not Use Audio Visual After Being Given Treatment

From the results of the study, it is known that the average score of writing ability in students given audio-visual media was 81, higher when compared to the group of students who did not use audio-visual of 52.16. From the results of the comparison test, it is known that the t-count value is  $11.185 > t\text{-table } 2.021$ . So it can be concluded that there is a significant difference in writing ability between students who have been given audio-visual media and those who do not use audio-visual. In other words, it can be said that students who have been given audio-visual media are better when compared to students who are not given audio-visual media.

### 3.6 Comparison of Improved Writing Ability Between Learners Who Use Audio Visual and Those Who Do Not Use Audio Visual

From the results of the study, it is known that the average score of increasing writing ability in students given audio-visual media was 32.12, higher when compared to the group of students who did not use audio-visual by 3.12. From the results of the comparison test, it is known that the t-count value is  $15.226 > t\text{-table } 2.021$ . So it can be concluded that there is a significant difference in the improvement of writing ability between students who use audio-visual and those who do not use audio-visual. In other words, it can be said that the improvement of writing ability in students using audio-visual media is better when compared to students who are not given audio-visual media.

### 3.7 Comparison of Writing Ability Between Learners Before and After Being Given Treatment In Groups Using Audio Visual

From the results of the study, it is known that the average score of students' writing ability in the group given audio-visual media before being given treatment was 48.88 and after being given treatment increased to 81. From the results of the comparison test, it is known that the t-count value is  $-14.418 > t\text{-table } 2.120$ . So it can be concluded that there is a significant difference in the improvement of writing ability between students before and after being given treatment in groups that use audio-visual. In other words, it can be said that the provision of audio-visual media can significantly improve the writing ability of students.

## 4. CONCLUSION

The research carried out is the application of audio-visual media which is categorized as visual media (illustrated, sound, moving). This audio-visual media is able to trigger students' critical thinking power, it can be seen by the activeness of asking students in the learning process, how to concentrate on learning, and from the results of writing argumentation texts that students make. Learners' critical thinking ability improves, after using audio-visual media. Learners are able to write argumentation texts of pros and cons that include critical thinking indicators. There is a difference between the ability to write argumentation texts pro and con before and after the sample gets treatment with the application of audio-visual media, thus having an impact on improving the critical thinking ability of students, thus hypotheses are acceptable.

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