

Effect of Thinking Aloud Pair Problem Solving (TAPPS) Method with Audio Visual Media for Students' Critical Thinking Ability

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ABSTRACT

The study aimed to find out the effect of the Thinking Aloud Pair Problem Solving (TAPPS) learning method with Audio-visual media, Thinking Aloud Pair Problem Solving (TAPPS) learning methods and expository learning models on students' critical thinking skills conducted by researchers at the VIII SMP Middle School Bandar Lampung students. The method used in this study is a quantitative method with a type of quasi-experimental design. The population in this study were all eighth grade students of Bandar Bandar Junior High School and the samples were students of class VIII C, VIII D, VIII E. Class VIII C and VIII D as the experimental class and class VIII E as the control class. Data collection uses tests, observation, documentation and interviews. The data analysis technique used is the normality test, homogeneity test, hypothesis testing using one-way analysis ANOVA. Calculation of data was analyzed using inferential statistics with the help of SPSS 16.0 software application. Based on the results of the calculation of research data obtained that the value of $\text{sig} < \alpha$, $\alpha = 0.05$ where the significance value of 0.049 H_0 is rejected. Shows that the Thinking Aloud Pair Problem Solving (TAPPS) method with Audio-visual media is more effective than learning using the expository model on students' critical thinking abilities.

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1. INTRODUCTION

The education system in Indonesia turns out to have undergone many changes. Changes occur because various efforts have been made in the renewal of education. As a result of this influence education has progressed. In line with these advancements, now education in schools has shown a very rapidly. Allah SWT privileges those who have faith and knowledge as He-says in the Quran Al-Kahfi letter verse 66.

قَالَ لَهُ مُوسَىٰ هَلْ آتَيْتُكَ عَلِيمًا نَّاتِلًا مُّتَعَلِّمِينَ مِمَّا عَلَّمْتَنِي رَبِّدَا

Meaning:

"Musa said to Khidir "May I follow you so that you teach me true knowledge among the sciences that have been taught to you?"

The verse explains that humans are creatures of Allah SWT who have knowledge, therefore Allah will privilege and elevate the degrees of knowledgeable people and education can be obtained anywhere. Basically learning is a communication process with the aim of delivering messages or information so that it can stimulate the thoughts, feelings, and interests as well as the attention of students. In order to develop the ability of students, one of them in the field of mathematics.

In 2015, the Trends in the International Mathematics and Science Study (TIMSS) showed that the mathematical ranking of --

VIII grade junior high school students in Indonesia ranked 36th out of 49 participating countries. TIMSS also measured students' attitudes towards mathematics, the results obtained showed that 20% of Indonesian students liked learning mathematics, 10% did not like learning mathematics, and 70% were normal.

Mathematics has a very important role for science and technology, but it is often considered a very difficult lesson and even becomes a scary thing in every teaching and learning activity. The selection of the right learning model will help students be more active in learning, so that the process and learning outcomes of students are expected to foster good mathematical thinking skills.

Based on the results of observations on February 19, 2018 in class VIII Taman Siswa Junior High School was seen when mathematics learning the teacher did the learning still using the expository model or what is known as the lecture method made the learning activities of the students not satisfying. Interactions between students and teachers or between students are rare. All activities of students depend on the teacher's orders.

2. RESEARCH METHOD

The method used for this research is Quasy Experimental Design. This design has a control group, but it cannot be used to control external variables that enhance the implementation of the

learning using the Thinking Aloud Pair Problem Solving (TAPPS) method with audio-visual media compared to the expository model of students' critical thinking skills in SMP Taman Bandar Lampung.

4. Conclusion

Based on the results of the analysis and discussion of the data, it can be concluded that there is an effect of learning using the Thinking Aloud Pair Problem Solving (TAPPS) method with audio visual media rather than using the expository method.

The application of the Thinking Aloud Pair Problem Solving (TAPPS) method with audio visual media went well and had a positive effect on the critical thinking skills of class VIII students at SMP Taman Siswa Bandar Lampung Student School.

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