

# THE INFLUENCE OF PROBLEM SOLVING LEARNING MODELS ON STUDENTS CRITICAL THINKING SKILLS IN INTEGRATED SOCIAL STUDIES SUBJECTS AT JUNIOR HIGH SCHOOL 11 SAMARINDA

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## ABSTRACT

When learning is carried out at Junior High School 11 Samarinda, it tends to only use the lecture learning model. Based on initial observations carried out by researchers through interviews and obtaining data on student learning outcomes from the Integrated Social Sciences teacher at Junior High School 11 Samarinda. It is known that students do not play an active role in the learning process, which results in a lack of student creativity so that learning outcomes do not reach the criteria for completeness. This study aims to determine the effect of the Problem Solving Learning Model on Students' Thinking Ability in Integrated Social Studies Subjects at Junior High School 11 Samarinda. This research is a quantitative research with the type of quasi-experimental research with research subjects in class VIII A as many as 28 students as the control class and VIII B as many as 30 students as the experimental class. Data collection was carried out in this study using observation techniques, tests and interviews. The results of this study were obtained from a simple linear regression test with a sig 2 tailed value  $<0.05$  with a calculation of  $0.179 <0.05$ . So it can be concluded that the use of the problem solving learning model makes students have increased intellectual potential within themselves and students have a sense of self-confidence in expressing their opinions and ideas so that it can stimulate the development of students' thinking abilities creatively and comprehensively, because in the student learning process uses a lot of mental energy to highlight problems from various aspects and approaches in order to find solutions.

**Keyword:** Problem Solving and Critical Thinking Ability

## INTRODUCTION

One of the main focuses of Social Sciences (IPS) learning objectives is to develop students' insight to understand the concepts of social sciences, humanities, natural sciences, and various social problems in life. Therefore, the concept of social studies learning opens up the possibility for students to become sensitive to social issues that arise in society, have a positive spirit, correct inequality that arises, and train skills in dealing with these problems.

The role of the teacher is very important in supporting the success of the learning process so that teachers are expected to be able to create a learning atmosphere that can develop students' thinking abilities so that they can improve student learning outcomes. In accordance with Gestalt theory in Wahyuni (2017: 85), student learning outcomes are influenced by two things, namely (1) the students themselves, namely their thinking abilities, and (2) their environment, in the sense of teacher creativity. in using learning methods. In accordance with these demands, this learning process requires students to actively participate in the process of teaching and learning activities in order to further improve their critical thinking skills in solving problems.

One method that can be applied to improve students' critical thinking skills is the Problem Solving method. In this method the role of the teacher is no longer dominant. The teacher only functions as a facilitator for students. This method is intended to influence students' interaction patterns so that they are not busy and active on their own such as chatting or joking with other friends while participating in learning activities. Apart from that, this method is also expected to train students to become critical thinkers so they can respond. to environmental conditions, both physical and non-physical. Physically, students are also expected to be able to collaborate well with other students.

Problem solving is a method that is not just a teaching method, but a method that can attract students to think, therefore this process is carried out, starting from searching for data to drawing conclusions. Problems also vary, they can be presented by teachers to students, or presented by students themselves, then used as material for discussion and finding solutions to problems as student learning activities.

In previous research, especially to measure the influence on the Problem Solving learning model, there was a type of research that used classroom action research (PTK) which required 2 cycles containing the stages of planning, implementation, observation and ending with reflection. Meanwhile, this research will use an experimental method which aims to determine the effect of treatment which has 3 stages, namely; 1) pretest to determine students' initial abilities, 2) implementing problem solving learning model learning in the experimental group and learning without problem solving models in the control group, 3) posttest to determine the effect of implementing this learning model.

Based on initial observations carried out by researchers through interviews and obtaining data on student learning outcomes from the Integrated Social Sciences teacher at Junior High School 11 Samarinda. It is known that students do not play an active role in the learning process, which results in a lack of student creativity so that learning outcomes do not reach the completeness criteria value set by the school, namely 70. This is reinforced by student learning results which state that 20 out of 30 students in class VIII A and 18 out of 28 students in class

VIII B students whose learning results did not meet the completeness criteria standards. This is because students are less active in learning and their learning outcomes are relatively low. It can be concluded that many students' grades in integrated social studies subjects are still incomplete. Based on these conditions, a learning model is needed that can increase student activity and learning outcomes.

Research conducted by Riandani (2012) resulted in the use of problem solving learning models being proven to improve students' critical thinking abilities. Further research conducted by Hajja (2015) stated that the problem solving learning model had an influence of 29.10% on critical thinking skills.

## **METHOD**

Experimental research is research that requires the researcher to manipulate and control one or more independent variables and observe the dependent variable to see the differences or research that looks at the causal relationship between two or more variables by giving treatment to the experimental group. To see the effect, the experimental group that was given treatment was compared with the experimental group that was not given treatment, this group is usually called the control group. This research aims to determine the influence of Problem Solving learning on the critical thinking of class VIII students in the Integrated Social Sciences subject at Junior High School 11 Samarinda. The research design is described as below.

Quasi-Experimental Research Design

Information :

O<sub>1</sub>: Experimental group before treatment

O<sub>2</sub>: Experimental group after being given treatment

O<sub>3</sub>: Control group before treatment

O<sub>4</sub>: Control group that was not given treatment

X : Treatment (Use of the Problem Solving learning method)

Research subjects are sources that provide information regarding data or something needed by researchers to be used as research material to be carried out. The subjects in this research were students and teachers of class VIII social studies at Junior High School 11 Samarinda. Based on the results of careful initial observations through interviews and obtaining data on student learning outcomes from social studies teachers at Junior High School 11 Samarinda. In initial observations, it was discovered that Junior High School 11 Samarinda had 8 classes, namely VIII A – VIII H. Researchers found that many students whose learning outcomes did not meet the KKM standards, namely 18 out of 38 students in class VIII A and 20 out of 40 students in class VIII B. so researchers are interested in making classes VIII A and VIII B the subjects of this research.

The data collection technique is a research step carried out by researchers with the first step being to meet research respondents who are used as supporting evidence and collect information that occurs in the field. The observations carried out were direct observations by looking at the students' learning process using the learning methods used and what the results of the learning process were. After observation, a test was carried out using the pre-test and post-test methods. The initial test uses the pre-test method which aims to determine students' initial abilities regarding the material to be delivered and the post-test as the final evaluation stage after the material is delivered.

After getting the test results, it is necessary to analyze the students' critical thinking skills in this study which were measured using an observation sheet test. Criteria for assessing students' critical thinking can be seen from the table below:

**Table 3.2 Range of Critical Thinking Ability Criteria**

Range	Criteria
81.26 - 100.00	Very critical thinking
62.51 - 81.25	Critical thinking
43.76 - 62.50	Less critical
25.00 - 43.75	Not critical

Source : (Andriyani, 2015 : 30)

## RESULT AND DISCUSSION

### Result

The research data used in this study is data obtained from the results of tests carried out twice, namely before being given treatment (pretest) and after being given treatment (posttest). The pretest is given to determine students' initial abilities regarding the background of Western nations to Indonesia. Meanwhile, the posttest is given to find out the extent of students' understanding of the material given with problem solving treatment so that it can be seen how much influence the problem solving treatment has on students' critical thinking abilities.

The pretest was carried out before the class was given treatment in order to measure students' initial abilities in understanding background material from Western nations to Indonesia in class VIII students at Junior High School 11 Samarinda.

**Table 4.3 Percentage of Pre-test Critical Thinking Ability Scores for Control and Experimental Classes**

No	Completeness	Frequency	Percentage
1	complete the control class	22	78,57 %
2	incomplete control class	6	21,42 %
3	complete the experimental class	5	16,66%
4	did not complete the experimental class	25	83,33 %

**Table 4.8 Percentage of Posttest Critical Thinking Ability Scores for Control and Experimental Classes**

No	Completeness	Frequency	Percentage
1	complete the control class	21	78%
2	incomplete control class	7	25%
3	complete the experimental class	30	100%
4	did not complete the experimental class	0	0%

### Discussion

At the first meeting the researcher gave an initial test (pretest) which aimed to see the initial abilities of students in both classes, the control class and the experimental class were given different treatment, the control class used conventional learning methods while the experimental class used problem solving learning methods, after being given different treatment At the end of the meeting, students were given a final test (posttest) consisting of 5 essay questions. This posttest was carried out to determine students' final abilities after being given treatment.

During the learning process, students are given material using a problem solving learning model, it appears that students are active in the learning process because students will systematically and logically look for problems or problems through data exploration to improve scientific attitudes. In the classroom situation, when direct observations are made during learning, students tend to follow the lesson and pay attention to the explanations given so that it can be seen if students are motivated in the learning process. After learning the problem solving model systematically, students unconsciously find out problem solvers, identify problems, and find the causes and impacts of an event on the learning problem. Assessment of students' critical thinking is not only seen from the value of student learning outcomes but is assessed from students' activeness and ability to identify problems, know the impact of a consequence, be able to answer questions and argue.

Based on the results of the analysis carried out by researchers on class VIII students of Junior High School 11 Samarinda, the achievement of critical thinking ability scores and Integrated Social Sciences learning outcomes on material on changes in Indonesian society during the colonial period and the growth of national spirit in the control class of 28 students obtained critical thinking ability scores. class VIII A students on the pretest test with an average score of 66, the highest score obtained by students was 94, the lowest score obtained by students was 47, and the number of students who had critical thinking skills was 22 students, and students who did not have critical thinking skills are 6 students. Meanwhile, the average posttest score obtained an average score of 67, the highest score obtained by students was 90, the lowest score obtained by students was 47, and the number of students who had critical

thinking skills was 21 students, and students who did not have critical thinking skills. are 7 students. It can be concluded that there is no significant increase, this is proven by the percentage increase in the pre test-post test in the control class of only 1% and can be seen in the students' critical thinking ability scores obtained from the use of conventional learning models in learning so that it makes students passive in receiving material.

The use of problem solving learning models that have been tested obtain positive results. Based on a simple linear regression test with a 2 tailed sig value  $< 0.05$  with a calculation of  $0.179 < 0.05$ , it can be concluded that there is a significant influence of the use of the problem solving learning model on students' critical thinking abilities in the Integrated Social Sciences subject at Junior High School 11 Samarinda.

## CONCLUSION

Based on the results of the discussion that has been put forward above, it can be concluded that the use of the problem solving learning model makes students have increased intellectual potential within themselves and students have a sense of self-confidence in expressing their opinions and ideas so that it can stimulate the development of students' ability to think creatively and comprehensive, because in the learning process students use a lot of their mental abilities by highlighting problems from various aspects and approaches in order to find solutions. This can be seen from the results and posttest critical thinking ability scores of the experimental class using the problem solving learning model which got an average score of 77, this value was higher than the control class which got an average score of 67. The experimental class experienced an increase in ability scores. Critical thinking is greater than the critical thinking ability score in the control class.

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