THE EFFECT OF USING THE INQUIRY METHOD ON THE UNDERSTANDING OF STUDENTS 'CRITICAL THINKING AND SOCIAL STUDIES SKILL CONCEPT IN THE STATE 3 SUNGAI RAYA JUNIOR HIGH SCHOOL KUBU RAYA

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ABSTRACT

This research is motivated by social studies learning problems that are still teacher-centered, causing students to be passive in learning which results in low understanding of social studies concepts and students' critical thinking skills. The purpose of this study was to determine the effect of the application of metacognitive learning through inquiry methods to increase understanding of social studies concepts and students' critical thinking skills. This study uses a quantitative approach to the quasi experimental method and the design of Non Equivalent Control Group Design. The population in this study were all eighth grade students of Junior High School 3 Sungai Raya as many as 320 people. Sampling is done by purposive sampling. The research data was obtained using test questions, questionnaires and subsequent observations were analyzed quantitatively. Quantitatively descriptive. The results of the study show that learning through inquiry methods can improve understanding of social studies concepts and students' critical thinking skills. But based on statistical calculations with the independent t-test shows that between the experimental class and the control class there were no significant differences. The responses of students to the application of learning through inquiry methods showed a good response as indicated by the results of the questionnaire that most students liked learning through inquiry, were more enthusiastic and active in learning activities, felt challenged in learning social studies material.
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Keyword: - *Social studies, Critical thinking skills, inquiry methods.*

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1. INTRODUCTION

The development of science and technology has an effect on human life, one of the positive influences is that it can facilitate human life, but on the other hand it can also have a negative effect on human life itself, including the emergence of social problems. To overcome these problems it is necessary to prepare future generations who are able to face and answer the challenge.

One of the facilities used to deal with these challenges is education. Education is a process to develop all the knowledge needed to face future challenges. Education is (1) Basic education is the level of education that underlies the level of secondary education, (2) Primary education in the form of Elementary School (SD) and Madrasah

Ibtidaiyah (MI) or other forms of equal and Junior High School (SMP) and Madrasah Tsanawiyah (MTs), or other equivalent forms, (3) provisions regarding basic education as referred to in paragraph (1) and paragraph (2) are further regulated by government regulations. (SISDIKNAS Law No. 20 of 2003 Article 17).

The First Middle School referred to here is the Middle School 3 Sungai Raya Middle School which is located at Jalan Adisucipto Gang Sepakat Km 17.5 Sungai Raya, Kubu Raya Regency, and West Kalimantan Province. SMP Negeri 3 Sungai Raya consists of three levels of classes namely Class VII, VIII and class IX. Most of the students of SMP Negeri 3 Sungai Raya mostly come from elementary schools in Limbung Village and its surroundings.

In the 2017/2018 school year students in SMP Negeri 3 Sungai Raya numbered 886 people. Consisting of 210 class IX people, 256 class VIII people and 320 class VII people. The conditions of teaching and learning in SMP Negeri 3 Sungai Raya are generally the same as the conditions in schools in general. The curriculum used in SMP Negeri 3 Sungai Raya uses the 2013 Curriculum (KURTILAS), but in understanding the concepts of learning and critical thinking in social studies learning is not satisfactory, making teachers use many strategies in order to increase understanding of the concepts of learning and critical thinking in social studies.

Based on the results of the daily test scores in the even semester 2017/2018 Academic Year, with the number of students 32 people consisting of 13 men and 19 women. From the table above it can be concluded that the minimum completeness criteria (KKM) is 75, then there are 15 students who are declared to be incomplete and 17 students are declared complete.

Based on the test results, in a classic that has not yet reached 53%, this situation makes teachers think of enrichment and remedial. In addition, the teacher also began to think about teaching strategies, using the right learning methods to be able to understand the concepts of social studies and critical thinking skills of students, so that there was an increase in student learning outcomes. Understanding the concepts in learning is very important because understanding the concepts of students can understand the material taught by the teacher. Weak understanding of the concept will lead to low student learning outcomes, as well as critical thinking will affect student learning outcomes. Innovative learning can develop students' critical thinking skills and understanding learning concepts.

Based on the explanation above, the innovative learning model that is interesting in accompanying changes in the paradigm is the inquiry learning model. According to Trianto Ibn Badar al-Tabani in Joyce (1992: 107) states:

"The core of good thinking is the ability to solve problems. The essence of problem solving is the ability to learn in puzzling situations. This in the school of these particular dreams, learning how to pervades what is the taught, and the kind of place in which it is taught"

It can be stated that good thinking is the ability to solve problems. The basis of problem solving is the ability to learn in thinking process situations. Thus the inquiry method can make students able to understand the concept of learning and be able to make students think critically in solving problems, especially in social studies learning. One of the innovative learning methods that can involve active students is the inquiry method. The inquiry method is designed to invite students directly into the scientific process in a relatively short time.

According to Trianto Ibn Badar al-Tabani (2017: 78) states inquiry means a series of learning activities that involve maximally all the ability of students to search and investigate thematically, critically, logically, analytically, so that they can formulate themselves his discovery confidently. Susanto (2016: 155) explains that inquiry learning models can make students trained to think critically, especially in social studies learning, one of which is to require students to be critical of the source in expressing the right facts. It can be concluded that the inquiry learning method is an activity that involves students to be directly involved in seeking and investigating thematically, critically, logically, analytically, so that they can formulate their own findings. Based on the explanation, the purpose of this study was to determine the understanding of social studies concepts and critical thinking of class VIII students in SMP Negeri 3 Sungai Raya, Kubu Raya District and to examine the effect of inquiry methods in social studies learning.

2. RESEARCH METHODS

The research method used in the experimental method with the form of research used is experiment (Quasi Experiment). The first class is the experimental class and the second class is the control class that is not chosen randomly because the class used is only two. The experimental group in this study were students of class VIII I and class VIII J as the control class. The quasi-experimental type applied in this study is the type of nonequivalent control group design. The steps in carrying out this research are: Preparation, Implementation includes determining classes which become executive classes, providing pre-tests, carrying out learning carried out using inquiry learning methods, making observations, giving and post-tests, distributing questionnaires; The final stage.

The population in this study were all eighth grade students of SMP Negeri 3 Sungai Raya, Kubu Raya District, 2017/2018 Academic Year with 320 students. The sample in this study were grouped into two groups, namely class VIII I as the experimental class with the number of 32 students and class VIII J as the control class with 32 students. This is done by considering that class VIII I and class VIII J are taught by the same teacher, both of whom get material for economic and agricultural reinforcement in Indonesia, the average daily test scores are almost similar, and have a minimum completeness criteria (KKM).) the same is 75.

Techniques and data collection tools that researchers use include direct observation techniques, measurement techniques, indirect communication techniques, documentary techniques. Data analysis techniques were carried out by quantitative analysis which included a comparative analysis of the results of questionnaires given to students in the experimental class before using learning with inquiry methods and after learning with inquiry methods.

3. RESULTS

Based on the Pretest value to obtain data on student critical thinking skills in the control class, an average yield of 55.44 means that the average grade of the class is still below the KKM, which is 75, with a maximum value of 75 there is 1 person or 2.9%. It can be concluded that critical thinking skills in the control class are in the less category. While the posttest data of student critical thinking skills, obtained an average of 79.8529 means that the average grade in the control class has reached KKM which is 75 with a maximum value of 95 which is obtained by 2 people. Posttest data shows 7 people or 20.6% whose values have not yet reached KKM. From these results it can be seen the tendency of pretest scores critical thinking skills students in the control class are the medium category.

While the pretest value for obtaining students' conceptual understanding data is done in the experimental class, the average results obtained are 52.03, which means that the average grade of the class in the experimental class is still below the KKM, 75, the maximum value in 75 is 1 person %, it can be concluded the tendency of pretest scores understanding the concept of experimental class students is a less category. While the posttest data of student concept understanding obtained an average of 83.7500, which means that the average grade of the class in the Experimental class has reached KKM, which is 75, the maximum value at the value of 95 obtained by 4 people. Posttest data shows 2 people or 6.3% whose values have not yet reached KKM. From these results it can be seen the tendency of pretest scores critical thinking skills students in the control class are the medium category.

Increased understanding of students' concepts after the inquiry method is applied assisted by media images in the experimental class calculated by the formula N-Gain Index and N-Gain Index of 0.738. According to Hake (1999: 1), "High-g" courses as those with ()> 0.7; "Medium-g" courses as those with 0.7> ()> 0.3; "Low-g" courses as those with () <0.3 ". Value of 0.738 if converted into the "High-g / High" category. It can be concluded that there is an increase in the understanding of students' concepts after the inquiry method is applied. While the increase in Critical Thinking Skills of students after applied problem-based learning methods obtained the average value of the N-Gain Index of 0.6171. It can be concluded that students' critical thinking skills increase after the problem-based learning method is applied.

Based on the results of testing the pretest data for the experimental class significance value p = 0.185 in the Kolmogorov-Smirnov test and 0.310 in the Shapiro-Wilk test, while for the experimental class the significance is p = 0.131 in the Kolmogorov-Smirnov test and 0.559 in the Shapiro-Wilk test, thus data the pretest samples of the experimental and control classes came from populations that were normally distributed. While the results of testing the posttest data for the experimental class were significant p = 0.116 in the Kolmogorov-Smirnov test and 0.77 in the Shapiro-Wilk test, while the experimental class was significance p = 0.123 in the Kolmogorov-Smirnov test and 0.154 in the Shapiro-Wilk test, so can be stated the posttest data of the experimental class and the control value p> α. Thus the samples of the experimental and control classes came from populations that were normally distributed.

Based on the results of testing the homogeneity test to determine the level of similarity of variance between the two groups, namely the experimental group and the control group. The results of the pretest data homogeneity test obtained the value of the F-test pre-test 1.725 with a significant value of 0.54. It can be concluded that the data in this study have a homogeneous variance. While the results of the posttest data homogeneity test obtained F count posttest 4.245 with a significant value of 0.423 can be concluded that the data in this study has a homogeneous variance. Then it can be concluded that the data in this study have homogeneous variance.

Experimental t-test and post-test t test results obtained mean: -31.71875 is negative, meaning there is an increasing tendency after treatment. The average increase is 31.71875. Probability value / p value T Paired test with results = 0,000, Value p value <0.05 (95% confidence), meaning that it can be concluded that there is a significant increase in the score of student learning outcomes of the experimental group. While the pre-test and post-test control class t-test, the negative mean-24.41176 results showed that there was an increasing trend after treatment. The average increase is 24.41176. Probability value / p value T Paired test with results = 0,000, Value p value <0.05

(95% confidence), meaning that it can be concluded that there is a significant increase in the scores of student learning outcomes in the control group. Based on the results of testing t the post-test data, it is known that the average learning outcomes of the experimental class 83.75 while the control class is 79.85, based on the results of the test obtained t count of -2.060 with a significance of 0.043. It can be concluded that there are significant differences in student learning outcomes scores in the experimental class and the control class.

Based on the calculation of the independent sample t-test it is known that the average increase in the experimental group is 2.79 while the increase in the control class is 0.81. Based on the value of t count of 8.270 with a significance of 0.000. So it can be concluded that there is a significant difference in the increase in learning outcomes scores significantly in the experimental group and the control group. Based on the calculation results using the formula of effect size from Cohen, it can be concluded that the effect of the inquiry learning method on understanding the social studies learning concept of 0.475038 is classified as moderate..

4. DISCUSSION

Research conducted on economic and agricultural strengthening material in Indonesia in class VIII of SMP Negeri 3 Sungai Raya, Kubu Raya District, 2017/2018 academic year. The research in the experimental class with a total of 32 students was given treatment using inquiry learning methods, while in the control class a total of 34 students used the problem-based learning method. Based on the results of data processing on the data understanding of the IPS concept before using the inquiry method in class VIII of SMP Negeri 3 Sungai Raya in the material "Strengthening Economics and Agriculture in Indonesia" the pretest results in the experimental class were known in the experimental class understanding IPS concepts before using inquiry methods in class VIII SMP Negeri 3 Sungai Raya can be declared lacking. Whereas in the control class the understanding of the IPS concept before using the problem-based learning method in class VIII of SMP Negeri 3 Sungai Raya can be expressed as lacking.

From these results it can be seen the tendency of pretest scores Critical Thinking Skills Students in the control class are the medium category. The results of the posttest analysis of the experimental class obtained the highest value of 95 and the lowest value of 70 with an average value of 83.75 in the experimental class. Based on the calculation of the results of the N-Gain Index it can be concluded that there is an increase in the understanding of students' concepts after the inquiry method is applied. While based on the results of the T test using SPSS version 18.0 for Windows software, it can be concluded that there is an increasing trend after treatment. It can be concluded that there is a significant increase in the scores of students' learning outcomes in the experimental group.

The critical thinking skills of Grade VIII students of SMP Negeri 3 Sungai Raya after using inquiry learning methods are known to average 79.8529 or have reached KKM which is 75. Based on the results of the N-Gain Index calculation it can be concluded that students' critical thinking skills increase after the method is applied learning inquiry. Critical Thinking Skills Students in the control class are in the medium category. While based on the results of the T test using SPSS version 18.0 for Windows software, it can be concluded that there is an increasing trend after treatment. It can be concluded that there is a significant increase in the score of the control group student learning outcomes.

Understanding can mean a person's ability to understand or understand something after something is known and remembered. A student is said to understand something if he can provide an explanation or description that is more detailed about the things learned. (Sudjana, 2012: 24). Based on the results of the calculations that have been made obtained the results of the study that there is an influence of inquiry learning methods on the understanding of the IPS learning concept that is equal to 0.475038 classified as moderate. Likewise based on the test results of the independent sample t-test it is known that the average increase in the experimental group is 2.79 while the increase in the control class is 0.81 so that the increase in the score of the experimental class learning score is greater than 1.98 compared to the control class. It is also known that the value of t count is 8.270 with a significance of 0.000, it can be concluded that t count> t table and the significance value is less than 0.05, so that there can be a significant difference in the increase in learning outcomes scores significantly in the experimental group and control group.

The results of this research are reinforced by Trianto Ibn Badar al-Tabani's (2017) which states inquiry means a series of learning activities that involve maximally all students' abilities to search and investigate thematically, critically, logically, analytically, so that they can formulate themselves his discovery confidently. The results of this study are in line with Adiarto (2015) research, the results of the study indicate a significant influence on student learning outcomes.

The magnitude of the influence of the use of inquiry methods in the material "Strengthening Economics and Agriculture in Indonesia" is very significant, there is an increase in the understanding of social studies concepts and students' critical thinking skills. This happens because in learning activities using the inquiry method students are directed to better understand the concept of substantial concepts by always doing research and reflecting on the

learning activities carried out so that students' understanding of learning material is more in-depth. Likewise with students' critical thinking, the increase is also very significant, this is because students are able to develop their thinking skills in seeing a problem related to learning material based on theories and evidence that they find themselves from valid sources and can be trusted. Improvement of critical thinking skills can be seen from the ability of students to give simple explanations and set strategies and techniques on the problems presented in the problem, while in building simple explanations and making conclusions need to be improved. This happens because students are less active in reading books, mass media, information on the internet, and other mass media so that their insights are limited.

5. CONCLUSIONS

Based on the results of the results of the research conducted, the conclusions of this study are as follows: Before being given treatment, the control class data was obtained as a less category. While the Experiment class before being given treatment was obtained Understanding the Concept of Students in the less category. After being treated, it can be seen the tendency of the pretest score critical thinking skills the control class students are the moderate category. While the tendency of pretest scores understanding the concept of social sciences students of the experiment class is the medium category. The magnitude of the influence of the use of inquiry method is very significant, there is an increase in the understanding of the IPS concept and students' critical thinking skills, this is because students are able to develop their thinking skills in seeing a problem related to learning material based on theories and evidence found itself from various sources that are valid and trustworthy.

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