Effect of Problem-Based Learning on Students 'Creative Thinking Ability in Five GradeSocial Studies Learning

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Abstract:- Problem-based learning is learning that refers to the ability of students to solve problems. This ability is not just gathering knowledge and rules. This ability is the ability to develop cognitive strategies, which help analyze unstructured and unanticipated situations strictly. to come up with meaningful solutions.The problem-based learning model requires teacher creativity so that students continue to be motivated in the learning process. Meanwhile, students are required to have mental activity in understanding concepts, principles, and learning skills through the problems presented at the beginning of learning. This application of problem-based learning also indicates how learning is and not what learning is. Students not only learn and accept what is presented by the teacher in learning, but can also learn from other students and have the opportunity to teach other students. Students are accustomed to finding solutions to the problems faced so that students 'ability to study independently can be further improved and in the end will improve students' thinking abilities.Based on the results of data analysis, it is proven that the research proves that problem-based learning affects the ability to think creatively in social studies learning for fifth grade students of SDN Airlangga I / 198 Surabaya. This is evidenced by the results of data analysis which shows tcount 2.944 (df 23)> t table 2.09 (df 23) and the value of Sig. (2-tailed) 0.007 <0.05, which means that Ho is accepted and Ha is rejected.

Keywords:- Problem-Based Learning, Creative Thinking.

I. INTRODUCTION

Education is an absolute thing that must be fulfilled by every human being. Education is a cultural process, in the sense that education is part of community activities to instill values and norms in the new generation, so that there is continuity in the cultivation of these values and norms. Sociologically, education is carried out in the family, school and community environment. The family is the first and most important institution in the educational process, because every human being grows and develops starting from the family. Education in the family cannot be replaced by other institutions. The role of parents is very necessary in it. The community is an educational institution to preserve culture by instilling value in the next generation or the new generation.

Learning in schools is seen as an activity to convey knowledge from the teacher to another party, namely students. The teacher is seen as an all-knowing source of information, while students are positioned as clueless people who just wait and absorb what the teacher provides. As emphasized by Dimyati and Mujiono (1994: 106), the dominance of teachers in the learning process causes students to play more roles and be involved passively, they wait more for a presentation from the teacher than seek and find for themselves the knowledge, skills, and attitudes they need. This causes the tendency of learning is still dominated by teachers so that teaching and learning activities are ineffective. Therefore there needs to be a change in learning, namely learning that is more directed towards student activities.

A teacher must always try to organize the learning environment so that it is passionate for students. Armed with various theories and experiences he has used them to prepare teaching programs properly and systematically. The teacher as a learning manager must be able to provide active and fun learning so that students can participate in learning with enthusiasm, and the material being taught can be accepted by students easily. One important part of learning activities in Social Sciences subject matter is developing an awareness of how learning occurs, in other words, students must get used to assessing how much they understand about the competence of the subjects they have learned.

In fact, during the social science learning process in the classroom, students only hear the material described by the teacher. Student activeness is assessed as low, indicated by students not recording the important points explained by the teacher, students are less active in asking questions, and students cannot answer questions when the teacher gives questions orally to students. During learning the teacher emphasizes students to memorize the material that is presented by the teacher. In addition, students are less involved in more concrete activities in gaining knowledge. So that student learning activities are less meaningful because they focus more on results rather than processes and ultimately indirectly burden the child. This implies the neglect of creativity in expressing ideas or ideas, namely limiting the development of thinking skills and new knowledge acquired by students. This contradicts the opinion of Pehkonen (in Siswono 2008: 20-21) which views creative thinking as a combination of logical thinking and divergent thinking based on intuition but still in awareness.

The results of interviews with fifth grade students during recess took place at SDN Airlangga I / 198 Surabaya, students also never did questions and answers with the teacher about social science material. According to fifth grade students of SDN Airlangga I / 198 Surabaya, social science subject matter is less attractive, because unlike challenging mathematics subject matter, social science lessons are more rote in nature, it can be concluded that social science subjects are less attractive to students. This fact is in line with the statement that social studies education is nothing more than a subject for memorizing information about social knowledge that is less powerful for students' social life (NCSS, 1994). The information that the researchers obtained from the teacher was that in delivering the subject matter the teacher did not use a varied learning approach, the teacher more often used the conventional model, namely the lecture method. The teacher reveals that with this method the teacher can complete the target material that must be completed in one semester. It is feared that the use of various kinds of new learning models cannot help teachers achieve the final material target. This raises its own difficulties in the teaching and learning process, whether it is experienced by the teacher who delivers the material or the student as the subject receiving the subject matter. So far, teachers still think that social studies learning is only rote in nature, so it is enough to read, write, explain, and problems. teachers more often use the conventional model, namely the lecture method. The teacher reveals that with this method the teacher can complete the target material that must be completed in one semester. It is feared that the use of various kinds of new learning models cannot help teachers achieve the final material target. This raises its own difficulties in the teaching and learning process, both experienced by the teacher who delivers the material or the student as the subject receiving the subject matter. So far, teachers still think that social studies learning is only rote in nature, so it is enough to read, write, explain, and problems. teachers more often use the conventional model, namely the lecture method. The teacher reveals that with this method the teacher can complete the target material that must be completed in one semester. It is feared that the use of various kinds of new learning models cannot help teachers achieve the final material target. This raises its own difficulties in the teaching and learning process, whether it is experienced by the teacher who delivers the material or the student as the subject receiving the subject matter. So far, teachers still think that social studies learning is only rote in nature, so it is enough to read, write, explain, and problems. It is feared that the use of various kinds of new learning models cannot help teachers achieve the final material target. This raises its own difficulties in the teaching and learning process, whether it is experienced by the teacher who delivers the material or the student as the subject receiving the subject matter. So far, teachers still think that social studies learning is only rote in nature, so it is enough to read, write, explain, and problems. It is feared that the use of various kinds of new learning models cannot help teachers achieve the final material target. This raises its own difficulties in the teaching and learning process, whether it is experienced by the teacher who delivers the material or the student as the subject receiving the subject matter. So far,

teachers still think that social studies learning is only rote in nature, so it is enough to read, write, explain, and problems.

In connection with the above phenomenon, it shows that the results of education are only visible from the ability of students to memorize. Learning is only a presentation that is merely providing information, the material specified is delivered through lectures. Even though many students are able to present a good level of memorization of the material they receive, but in reality they often do not understand deeply the substance of the material. Students' understanding of the facts that are interrelated and their ability to use this knowledge in new situations has not been seen. Most students have not been able to connect what they learn with how this knowledge will be used or utilized. Students have difficulty understanding the concepts in social science material.

In general, problem based learning is a learning approach that uses real-world problems as a context for students to learn about critical thinking and problem-solving skills, as well as to acquire essential knowledge and concepts from course material or subject matter. In short and simple terms, Rhem (1998) defines problem based learning as learning that begins when a problem is faced by students. So, problem based learning is a learning method that uses problems as a first step in gathering and integrating new knowledge. This problem then determines the direction of learning carried out in groups.

Working with partners, openness and honesty, respect, and trust are the values that underlie problem based learning as listed by Baptiste (2003). Partnership, or partnerships, are based on a collaborative foundation that also helps build problem based learning. In working with peers, students are given the freedom to decide what they want to learn and what they want to get in the end. Common vision is important. Honesty and openness need to be built from the start so that teachers can facilitate the desires of students. Because collaborating with partners or colleagues in groups, students must also respect and treat their colleagues with kindness and respect. Taking risks is also an element in problem based learning, but this needs to be based on the trust of students to jointly take risks for the group. In addition, Baptiste added that problem based learning has characteristics, including learning centers for students or students, the role of the teacher or teacher as a facilitator or guide, the position of the problem or learning scenario as a basis, focus and stimulus, and the achievement of new information and understanding through self-directed and self-directed learning.

According to Sapriya (2009: 25), understanding and analytical skills are processes that are in line with a person's level of thinking development, meaning that the older the student is, the higher the level of understanding and analysis. This has something to do with the level of cognitive development proposed by Piaget (in Wadsworth, 1988) which identifies the stages of intellectual development (cognitive) that the child goes through, namely: (a) the motor sensory stage aged 0-2 years; (b) operational stage 2-

6 years old; (c) concrete operational stage aged 7-10 years; (d) formal operational stage aged 10-12 / 13 years and over. In essence, it can be concluded that the higher the thinking ability and the sharper the level of understanding and analysis in studying the material.

Understanding a problem is shown by knowing what is known and what is being asked. Planning to solve a problem is shown by organizing existing information or data creatively by using certain strategies to find possible solutions. In understanding and planning for problem solving, students need adequate creative thinking skills, because this ability is the ability to think (reasoning) at a high level after basic (basik) and critical thinking (Krulik, 1995: 3).

The 2013 curriculum states that social Sciences developed as an integrated social studies subject, not as a scientific discipline. Social Sciencesas an applicative-oriented education, developing thinking skills, learning abilities, curiosity, and developing a caring and responsible attitude towards the social and natural environment. This goal can be achieved if the teacher in the management of learning implements it dynamically. This requires the ability of teachers to teach learning concepts by bringing students closer to the objective reality of their lives, so that students are sensitive to social problems that occur in society, have positive mental qualities and are skilled in dealing with daily problems in personal and community life.

Based on this, this research is directed at the influence of problem-based learning models on the ability to think creatively in learning social Sciencesin fifth grade SDN Airlangga I / 198 Surabaya. Through this research, it is hoped that it can provide alternative solutions to explore and influence the dimensions of creative thinking skills that can develop in social science learning and be able to face challenges in the future, and apply them in real life.

II. THEORETICAL FRAMEWORK

➢ *Problem Based Learning*

Problem-based learning is learning that refers to the ability of students to solve problems. This ability is not just gathering knowledge and rules. This ability is the ability to develop cognitive strategies, which help to analyze tightly unstructured and unanticipated situations. to produce meaningful solutions. Problems are a focus and stimulus for learning and are a means of developing problem-solving skills. Problem-based learning presents authentic and meaningful problem situations to students, which can serve as a stepping stone for investigation and investigation (Arends, 2012: 394). Furthermore, according to Arends,

According to Savery & Duffy (1995) in (Hsing Wu College, 2012: 123) explained problem-based learning as a curriculum design that identified students not as passive recipients of knowledge but as problem solvers who could develop disciplinary knowledge and problem solving strategies to confront ill-structured problems that occur in the real world. Describe problem-based learning as a

curriculum design that identifies students as not passive in receiving knowledge but as problem solvers who can develop knowledge and problems that occur in the real world.

According to Arends (2008: 42) the essence of problem based learning is in the form of presenting authentic and meaningful problematic situations to students, which can serve as a basis for investigation and investigation. Planning or learning patterns that refer to the five main steps of problem-based learning according to Arends (2012: 411), namely: (1) orienting students to problems, (2) organizing students to learn, (3) guiding individual and group investigations, (4)) presenting and displaying the work, (5) analyzing and evaluating the problem-solving process.

According to Ibrahim (2005: 5), problem-based learning is defined as learning that uses problems as a first step to acquire new knowledge. Students use certain authentic problems to learn lesson content and vice versa students also learn special skills to solve problems using content means (content) lessons. This theory, the teacher presents real problems in learning and requires students' skills to solve them in groups. Arends (2012: 397) suggests that problem-based learning is learning with a student learning approach to authentic problems so that students can compile their own knowledge, develop higher skills and inquiry, become independent of students, and increase self-confidence.

Constructivism theories about learning, which emphasize the need for students to investigate their environment by constructing knowledge which personally means providing a theoretical basis for problem-based learning (Arends, 2008: 43). Problem-based learning is defined as a learning model that uses problems as a starting point for forming new knowledge. Students use authentic and meaningful problems to learn lesson content and vice versa students also learn specifically to solve problems using learning content tools (Ibrahim, 2012: 8).

➢ *Creative Thinking Ability*

According to Maria Daskolia, (2012: 271) states in the EE literature, creative thinking is implicitly considered to be either an essential quality of thinking and learning about the environment and current environmental issues, and coping effectively with them, or a prerequisite for visioning and designing alternative sustainable futures. Its relevance as a particular genre of thought processes, as an ability or as a state of mind that must be applied by people confronted with present and future complex, uncertain and con- flicting socio-environmental realities has been emphasized by some prominent scholars (Disinger & Howe, 1992; Bowers, 1995; Simmons, 2000; Chawla, 2002; Wals, 2010) and organizations in the field (North American Association for Environmental Education [NAAEE], 2002).

The above statement means that in the NAAEE literature, creative thinking is implicitly considered an essential quality of thinking and learning about the

environment and current environmental issues, and of effectively addressing existing problems, or a prerequisite for viewing and designing a sustainable future. Its relevance as a particular type of thought process, as the ability or state of mind to which people are faced with complex, uncertain and opposing present and future socio-environmental realities has been emphasized by some prominent persons (e.g., Disinger & Howe, 1992). ; Bowers, 1995; Simmons, 2000; Chawla, 2002; Wals, 2010) and organizations in the field (North American Association for Environmental Education [NAAEE], 2002). Creative thinking is universal and human and can be developed through formal eduction (McWilliam & Dawson, 2008: 456). Creative thinking is universal and human and can be developed through formal education (McWilliam & Dawson, 2008: 456 in Hannetjie Meintjes and Mary Grosser, 2010: 382).

Siswono (2008: 14) defines that creative thinking (creative thinking) is a series of actions taken by people using their intellect to create new thoughts from a collection of memories containing various ideas, information, concepts, experiences, and knowledge. shows that creative thinking is characterized by the creation of something new from the results of various ideas, information, concepts, experiences, and knowledge that is in his mind. Siswono (2008: 15) concludes that creative thinking can be interpreted as a mental activity that a person uses to build ideas or new ideas.

Pehkonen in (Siswono 2008: 20-21) views creative thinking as a combination of logical thinking and divergent thinking based on intuition but still in awareness. When a person applies creative thinking in a problem-solving practice, intuitive divergent thinking generates many ideas. Siswono further explained that creative thinking pays attention to logical and intuitive thinking to generate ideas. Creative thinking requires two parts of the brain. The balance between logic and intuition is very important. If you place too much logical deduction then creative ideas are ignored. generating creativity requires freedom of thought not under control and pressure.

Laurence (in Wijaya 2012: 55) believes that creativity is a skill that can be learned. The failure of a person to carry out an innovation or create a creation is not due to a lack of creative potential (the lack of creative potential) but because of a lack of knowledge to manage. manage) all the potential that he has to achieve a goal. The ability to think creatively is indeed a natural potential possessed by humans, but what is more important is that creative thinking is a natural process that can be increased through awareness or training or practices (Adams & Hamm in Wijaya, 2012: 55).

➤ *Social Sciences*
Social science is defined as the knowledge of humans in their environment. According to Soemantri (2001: 79) Social Science Learning helps each student build a foundation for understanding reality. Social science is one of the subjects that examines a set of events, facts, concepts, and generalizations related to social issues (Permendiknas Number 22 of 2006). This shows that the formulation of

social science learning objectives contains components (1) operational verbs that describe cognitive, affective, and psychomotor activities, (2) events / facts (social life settings contained in the chosen topic / theme), (3) concepts and relationships between concepts (generalization), (4) learning subjects (learners),.

Judging from the study material according to the explanation of article 37 of Law no. 20 of 2003 concerning the National Education System (2003: 86), that "the study material of social sciences, among others, earth science, history, economics, health, and so on ...". This is where the need for simplification, selection, adaptation, and modification of subject matter according to the level of intelligence and mental maturity of students. Through the subject of social science, students are directed to become democratic, responsible citizens of Indonesia, as well as global citizens who love peace. Social science is a science that is always developing, therefore the subject of social science is designed to develop knowledge, understanding, and analytical skills on the social conditions of society in entering a dynamic community life.

So, by studying social science students are not only guided and directed to understand themselves, but also other people and the environment that support their lives and human life in general. So that through learning social science students are expected to be sensitive to social problems. The benefits that are expected for students by studying social science in their lives are that students gain direct knowledge and experience how to think creatively to find problems and at the same time solve these problems.

III.   RESEARCH METHOD

This research uses an experimental quantitative approach. Experimental quantitative research is a research method used to find the effect of a treatment or manipulation on other variables under conditions controlled by the researcher (Sugiyono, 2010). This study aims to examine specific populations or samples, random sampling, data collection using research instruments, quantitative and statistical data analysis with the aim of testing a predetermined hypothesis. This type of research is a quasi-experimental with a nonequivalent control group design pattern.This study uses a quantitative approach with experimental methods. This study aims to determine the effect of problem-based learning on creative thinking skills in social science learning. The method used in this research is the experimental method. This is done to provide a clear picture of the effect of problem-based learning on students' creative thinking abilities. In experimental research, researchers attempt to examine and find the effect of certain variables on other variables in a deliberately controlled, constant state (Komaruddin Sastradipoera, 2005: 167).

Class	*Pretest*	*Treatment*	*Posttest*
Experiment	O1	X	O2
Control	O3	C	O4

Table 1:- Nonequivalent Control Group Design

Information:
O1 : The initial test in the experimental group
O2 : The final test in the experimental group
X   : Problem based learning
C   : Direct learning
O3 : Initial test in the control group
O4 : The final test in the control group

SubjectThis research is the students of class VA SDN Airlangga I / 198 Surabaya with 25 students as the experimental group and the VC class students of SDN Airlangga I / 198 Surabaya with 25 students as the control group. Collecting data in research using tests and observations. Giving tests to obtain data on learning outcomes oriented to creative thinking, this test is in the form of a description written test which is given in two stages, namely the pretest and posttest. While observations to obtain student response data were analyzed and the implementation of the problem-based learning model contained in the learning implementation plan and research constraints, observations were made by two observers using the same instrument.

Prior to data analysis, the researcher conducted a validity test and a reliability test which aimed to determine the feasibility of an instrument. The data collected from the results of the distribution of the instruments were then analyzed using the normality test and the homogeneity test. After that, the hypothesis is tested.

IV. RESULT

Before being used for research, the instruments used were validated first by an expert validator. The results of validation by the validator are presented below:

No.	Validated instrument	Score			Predicate
		V1	V2	Average	
1.	Lesson plan	4.00	4.00	4.00	Very valid
2.	Student teaching materials	4.00	3.80	3.90	Very valid
3.	Student worksheet	3.90	3.40	3.65	Very valid

Table 2:- Results of the Validation of Research Instruments by Expert Validators
Source: Data processed by the author, 2020

Researchers tested the feasibility of the research instrument before analyzing the research data. At this stage 3 indicators of the assessment sheet for the ability to think creatively are declared valid if rcount is greater than rtable. The total number of students N = 20 with a significance level of 5% is 0.359. From the data analysis using SPSS, it was found that all aspects of language development were declared valid.

Aspect	r Count	r Table	Information
Indicator 1	0.836	0.359	Valid
Indicator 2	0.801	0.359	Valid
Indicator 3	0.817	0.359	Valid

Table 3:- Results of the Validity Test of the Student Creative Thinking Assessment Sheet
Source: Data processed by the author, 2020

After the research instrument validity test was carried out, the next step was the researcher doing the reliability test. This is to find out whether the test instrument is reliable or not. Reliability testing in research instruments that have been trusted and reliable will produce reliable data too. In this study, a reliability test was conducted to test the student's creative thinking assessment sheet instrument using alpha cronbach's through the SPSS data processing program. The results of the reliability of language development are as follows.

Cronbach's Alpha	N of Items
,747	3

Table 4:- Reliability Test Results of Student Creative Thinking Assessment Sheet
Source: SPSS output

Based on the table above, the results obtained from the reliability test of the student's creative thinking assessment sheet instrument showed a reliability of 0.747. Based on the clarification table of the reliability coefficient (Ruseffendi in Sundayana, 2015: 12) it is known that the reliability test results of the student's creative thinking assessment sheet instrument have a high reliability level with the criteria of $0.60 \leq 0.747 \leq 0.80$) so this instrument can be used in research.

In accordance with the formulation of the problem and hypothesis in this study, the data processed in this study came from the observation data of students' creative thinking abilities. Data on students' creative thinking abilities in the experimental and control classes consisted of two data derived from the research instrument of the student's creative thinking ability assessment sheet. The observation sheet of students' creative thinking abilities was carried out twice in each class, both in the experimental and control classes.

The first observation is carried out before being given treatment or when students do social science learning before the experiment is carried out. The first group of data for assessing students' creative thinking abilities is called the pretest data group. The second observation was carried out when conducting experiments in the experimental and control classes. This second group of data for assessing creative thinking skills is called the posttest data group. The results of the pretest and posttest data descriptions of students' creative thinking abilities can be described in table 5 as follows.

No.	Description	Value of Students' Creative Thinking Ability			
		Experiment Class		Control Class	
		Pretest	*Posttest*	*Pretest*	*Posttest*
1	Average	74.71	89.29	72.36	81.72
2	N-GAIN	0.58		0.34	
2	Lowest Value	58	67	58	67
3	The highest score	92	100	92	100
4	Median	75	92	75	83
5	Mode	67	100	67	83
6	Standard Deviation	11,749	10,569	9,848	11,223

Table 5:- Descriptive Statistics of Pretest and Posttest Data Students' Creative Thinking Ability
Source: Data processed by the author, 2020

From table 5 it is known that from the experimental class data obtained pretest and posttest data on students' creative thinking abilities. The pretest in the experimental class obtained an average value of 74.71, the lowest score was 58, the highest score was 92, the median value was 75, the mode value was 67, and the standard deviation was 11.749. The posttest in the experimental class obtained an average value of 89.29, the lowest score was 67, the highest score was 100, the median value was 92, the mode value was 100, and the standard deviation was 10.569. The results of the description of the data on students 'creative thinking abilities in the experimental class showed an increase in students' creative thinking abilities, this can be seen from the average value that there is a difference between the pretest and posttest data of 14.58. This shows that there are differences in the value of students' creative thinking abilities which posttest is superior to pretest. In addition, the N-Gain value was obtained at 0.58, which means that there was an increase in students' creative thinking abilities from before (pretest) to something (posttest) experiment with the moderate increase category. Thus, the provision of social science learning treatment with problem-based learning models is able to have an impact on increasing the creative thinking skills of VA students at SDN Airlangga I / 198 Surabaya.

Whereas in the control class also obtained pretest and posttest data on students' creative thinking abilities. The pretest data group obtained a valueThe average value is 72.36, the lowest value is 58, the highest value is 92, the median value is 75, the mode value is 67, and the standard deviation is 9.848. The posttest in the control class obtained an average value of 81.72, the lowest score was 67, the

highest score was 100, the median value was 83, the mode value was 83, and the standard deviation was 11.223. The results of the description of the data on students' creative thinking abilities in the control class showed an increase in students' creative thinking abilities. This can be seen from the average value that there is a difference between the pretest and posttest data of students' creative thinking abilities by 9.36. In addition, from the N-Gain value, the result was 0.34, which means that the increase in students' creative thinking skills in the control class was categorized as low. Therefore,.

Based on the explanation above, it is known that in the pretest data group the creative thinking ability of students in the experimental and control classes there is a slight difference in the aspect of the average score. The difference in the average value in the pretest data group between the experimental and control classes was 2.34. Thus, in the initial conditions or before being given treatment, the two classes had almost the same creative thinking abilities. Meanwhile, in the posttest condition, there are quite a lot of differences in the aspect of the average score. The difference in the posttest mean score of students' creative thinking abilities between the experimental class and the control class was 7.57. Apart from that, the conditions for the improvement of students' abilities in the experimental and control classes also have differences, if the experimental class shows an increase with the N-Gain value,

The normality test is used to test whether the data is normally distributed or not. Testing for normality used the chi-square formula with a significance level of 0.05 or 5%, using SPSS.

Group	Group	Value of Significance	Level	Information
Pretest	Experiment	0.841	0.05	Normal
Posttest		0.170	0.05	Normal
Pretest	Control	0.308	0.05	Normal
Posttest		0.736	0.05	Normal

Table 6:- Normality Test Results
Source: Data processed by the author, 2020

Test for normality using the chi-square formula with a significance level of 5%, namely 0.05. If the significance value <0.05, the conclusion is that the data are not normally distributed. However, if the significance value is> 0.05 then the data is normally distributed. Based on table 6 above, all

variables have a value of more than 0.05, so it can be stated that all research variables have a normal distribution.

This homogeneity test is carried out to test the similarity of several different samples. The homogeneity test

of the data is calculated using the Bartlett test using SPSS with the criteria that if the probability is (P> 0.05) the sample is homogeneous, whereas if the probability is (P <0.05) then the sample is not homogeneous.

Variable	Group	Score Significance	Level	Information
Pretest	Experiment	0.428	0.05	Homogeneous
	Control			
Posttest	Experiment	0.770	0.05	Homogeneous
	Control			

Table 7:- Homogeneity Test Results
Source: Data processed by the author, 2020

Table 7 is the homogeneity test data using the 5% significance level, namely 0.05. The conclusion is, if the significance value <0.05, the variance of the data group is not homogeneous, and if the significance value is> 0.05, the variant of the data group is homogeneous. Based on the table above, all variables have homogeneous data variants

Hypothesis testing is used to answer the problem formulations and hypotheses proposed in this study. Hypothesis testing used in this study is to use the t test.The t test is needed to partially test the significance level between each independent variable's influence on the dependent variable.

Variable	T	Df	Sig. (2-tailed)	Description
Pretest	0.772	48	0.448	Ha is rejected
Posttest	2,944	48	0.007	Ha accepted

Table 8:- Hypothesis test
Source: data processed by the author, 2020

The results of the analysis in table 8, the results of students' creative thinking skills at pretest show the results of the sig 2 tailed analysis of 0.448 <α (0.05) with tcount> ttable of (0.772 <2.010), then it can be stated that Ha is rejected. Thus, it can be stated that there is no significant difference in students' creative thinking abilities before the treatment in the experimental class with the control class class. This shows that both classes have the same creative thinking skills before being given the treatment.

While the results of students' creative thinking skills during the post-test showed the results of the analysis of the sig 2 tailed value of 0.007 <α (0.05) with tcount> ttable of (2.944> 2.010), it can be stated that Ha is accepted. Thus, there is a significant difference in the creative thinking abilities of students in the experimental and control classes. It is proven that problem-based learning has a significant and positive effect on the ability to think creatively in social science learning for fifth grade elementary school students.

V.   DISCUSSION

The initial condition of students' critical thinking skills in the control class before being given social science learning with group discussion and question and answer learning methods obtained an average value of 72.36. If this value is adjusted to the minimum completeness value used in SDN Airlangga I / 198 Surabaya, which is 75, it shows that classically the control class students' creative thinking ability is still not complete. In detail, of the 25 students in the control class, 12 students with a score of 67 were 8 students and 58 were 4 students. While the remaining 13 students got a score of ≥ 75 with a variation of the value of

75 as many as 7 students, 83 by 4 students, and 92 as many as 2 students. This initial condition is obtained when learning social science uses the lecture and question and answer method. This shows that the use of lecture and question and answer methods is not appropriate to optimize students' creative thinking abilities.

After taking data on students' creative thinking abilities before being given treatment in the control class, the researcher collaborated with the teacher to conduct an experiment in improving the lecture and question and answer method learning by adding the group discussion and question and answer learning method The results of the observation and assessment of the ability of learning creativity in the control class when social science learning was carried out through the group discussion learning method and the students' question and answer received a good score, which was 81.72 on average. This value is> 75, so classically it shows that students who study social studies with the group discussion and question and answer method in the control class are able to improve their creative thinking skills.

Based on the explanation above, it shows that from the initial conditions in the form of learning with the lecture and question and answer methods to the learning conditions with the group discussion and question and answer method, the ability to think creatively was increased. This is because at first students only get learning by listening to the teacher's explanation through lectures and questions and answers regarding unclear explanations, then students will feel monotonous and untrained to develop creative thinking skills. Whereas in the conditions of social science learning with group discussion and question and answer learning

methods, students experience discussion activities with their groups answering questions from teachers and other group friends, so that new ideas and ideas emerge that can become creative thinking training techniques. However, the result of questions that are not concrete and far from local wisdom, as well as the existence of a non-heterogeneous group division, causes some study groups to be inactive in finding ideas and problem solving ideas. This condition causes students' creativity ability to be uneven.

The initial condition of students' critical thinking ability in the experimental class before being given social science learning with problem-based learning, the result was an average value of 74.71. This value, if adjusted for the minimum completeness value used in SDN Airlangga I / 198 Surabaya, is 75, indicating that classically the creative thinking ability of students is still not complete. In detail, from the 24 students in the experimental class, 10 students with a score of 67 were 6 students and 58 were 4 students. While the remaining 14 students got a score of ≥ 75 with a variation of the value of 75 as many as 6 students, 83 by 3 students, and 92 as many as 5 students. This initial condition is obtained when social studies learning uses the lecture and question and answer method. This shows that the use of lecture and question and answer methods is not appropriate to optimize students' creative thinking abilities. Wiriaatmaja (2002: 229) explains that social science learning helps each student build a foundation for understanding reality. Social science is one of the subjects that examines a set of events, facts, concepts, and generalizations related to social issues. Responding to the explanation of social science, it is not enough to develop creative thinking skills if it is done with lectures and questions and answers, this is because students' creativity can be increased by practice and provision of experience. Wiriaatmaja (2002: 229) explains that social science learning helps each student build a foundation for understanding reality. Social science is one of the subjects that examines a set of events, facts, concepts, and generalizations related to social issues. Responding to the explanation of social science, it is not enough to develop creative thinking skills if it is done with lectures and questions and answers, this is because students' creativity can be increased by practice and provision of experience. Wiriaatmaja (2002: 229) explains that social science learning helps each student build a foundation for understanding reality. Social science is one of the subjects that examines a set of events, facts, concepts, and generalizations related to social issues. Responding to the explanation of social science, it is not enough to develop creative thinking skills if it is done with lectures and questions and answers, this is because students' creativity can be increased by practice and provision of experience. and generalizations relating to social issues. Responding to the explanation of social science, it is not enough to develop creative thinking skills if it is done with lectures and questions and answers, this is because students' creativity can be increased by practice and provision of experience. and generalizations relating to social issues. Responding to the explanation of social science, it is not enough to develop creative thinking skills if it is done with lectures and

questions and answers, this is because students' creativity can be increased by practice and provision of experience.

After taking data on students' creative thinking abilities before being given treatment in the experimental class, the researcher collaborated with the teacher to conduct an experiment in improving the teaching and answer method of learning. Referring to the opinion of Adams & Hamm in Wijaya (2012: 55) that the ability to think creatively is indeed a natural potential possessed by humans, but what is more important is that creative thinking is a natural process that can be increased through awareness and practices, the researchers compile a science learning plan. social knowledge with a focus on increasing the ability to think creatively by using a problem-based learning model.

The results of observations and assessments of the ability of learning creativity in the experimental class when social science learning through problem-based learning were carried out, the students obtained good scores, namely an average score of 89.29. The value is> 75, so classically it shows that students studying social science with problem-based learning in the experimental class are able to improve creative thinking skills. In detail, from the total value of the ability to think creatively in the experimental class, there are some students who have not completed, namely 2 students with a score of 67.While the remaining 22 students get a score of ≥ 75 with a variation of 75 values of 2 students, 83 of 5 students, 92 as many as 7 students, and 100 as many as 8 students.

The increase here shows that students can optimize their ability to think creatively in problem-based learning. The ability to think creatively involves students' cognitive abilities, so it is necessary to provide stimulants in the form of problems in the learning process. As stated by the implications of children's cognitive development, one of which is that children will learn better if they can face the environment well. Teachers must help children, accommodating so that children can interact with the environment as well as possible. This statement is related to the application of problem-based learning in the experimental class which is applied by referring to the opinion of Arends (2012: 411), namely: (1) orienting students to the problem, (2) organizing students to learn, (3) guiding individual and group investigations, (4) presenting and displaying the work, (5) analyzing and evaluating the problem-solving process. The relationship is that in problem-based learning as referred to by Arend, students are faced with problems and are required to learn to solve them, thus encouraging students to think about relating their experiences to existing problem conditions which will eventually result in the form of problem solving ideas and ideas. The existence of these problem solving ideas and ideas contributes to the practice of developing students' creative thinking skills. The relationship is that in problem-based learning as referred to by Arend, students are faced with problems and are required to learn to solve them, thus encouraging students to think about relating their experiences to existing problem conditions which will eventually result in the form of problem solving ideas and

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The findings of this study are relevant to relevant research results such as research from Musdinah (2013) that student learning outcomes show the completeness of the minimum completeness criteria after the learning process using the connected type integrated learning model with a problem-based approach in social studies learning with 84% completeness and student activities. also better than previous studies. Buhadi Aziz's research (2014) concluded that the quality of students' critical thinking skills questions increased with an increase of 34.15%. It can be concluded that there is an increase in creative thinking skills.

Apart from the data analysis of hypothesis testing which states that problem-based learning has an effect on the ability to think creatively in students' social science learning, it is also supported by the difference in the mean scores of the experimental and control classes. The experimental class obtained an average value of 89.29 while the control class was 81.72, which means that the experimental class was 7.57 superior to the control class. This means that the application of problem-based learning in social science learning is more appropriate than the group discussion and question and answer learning methods.

Siswono (2008: 14) explains that the limitation that creative thinking (creative thinking) is a series of actions taken by people using their intellect to create new thoughts from a collection of memories containing various ideas, information, concepts, experiences and knowledge. Based on this explanation, it shows that students' creative thinking skills are seen from their ability to find new ideas and problem-solving ideas, while in problem-based learning in the experimental class the teacher only acts as a facilitator. The teacher's role in the problem-based learning model is reflected in the delivery of problems related to the subject matter at the beginning of learning and students must find answers individually or in groups. The teacher only provides necessary guidance if students have difficulties so that students will be trained to find ideas and problem solving ideas independently or in groups. This condition shows that students in the experimental class who study social science with problem-based learning models are more optimal in developing their creative thinking skills. This is supported by the statement from Sudrajat, (2011) that problem-based learning has several advantages, one of which involves actively solving problems and demands higher thinking skills of students. This condition shows that students in the experimental class who study social science with problem-based learning models are more optimal in developing their

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VI. CONCLUSSION AND SUGGESTION

❖ *Conclusion*

Based on the research that has been carried out and the difference test with the Independent t-Test, it is concluded that there is a positive and significant effect of problem-based learning models on the creative thinking abilities of fifth grade elementary school students.. The results of these studies were proven from data analysis using a different test (t-test), namely t_{count} 2.944> 2.069 t_{table} and the value of Sig. (2-tailed) 0.007 <0.05, which means that Ha is accepted. Thus the application of problem-based learning is more appropriate in influencing students 'creative thinking abilities, where the better and more appropriate the material conditions and students in applying problem-based learning, the students' creative thinking skills will be affected to be increased and better.

❖ *Suggestion*

Teachers are expected to be able to understand properly and correctly problem-based learning, so that it can involve several interactive learning methods and media by adjusting the conditions of the material, students, and the environment, so as to maximize the application of problem-based learning, especially to improve students' creative thinking skills. Kelebihan dan Kekurangan penelitian ini, diharapkan dapat menjadi bahan referensi guru dalam menerapkan model pembelajaran berbasis masalah untuk mengoptimalkan kemampuan berpikir kreatif pada khususnya dan keseluruhan kemampuan dalam hasil belajar pada umumnya.

It is hoped that from the results of the research students will be more active in identifying learning problems by thinking empirically and logically to find new ideas and ideas to solve problems in learning, can further improve their ability to interact with friends and communicate properly and correctly, so that students will be able to optimize his ability, especially the ability to think creatively, and be able to learn more actively and increase his experience and knowledge.

The school is expected to identify and review the results of this research by paying attention to the advantages and disadvantages, especially the form of implementing problem-based learning in social studies lessons, so that it can be used as input and reference to improve the quality of learning in each class and subject through the application of

problem-based learning, so as to improve objectives. major education such as the ability to think creatively.

Other researchers are expected to identify and review the results of this study by maintaining the strengths of this research, and noting the shortcomings of this study, then evaluating them as material for correcting the shortcomings of this study, so that better and more valid research results are obtained regarding the application of problem-based learning models and their effects. to all students 'abilities in general, and students' creative thinking abilities in particular.

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