

Improve Student`s Critical Thinking Through Problem Based Learning Model in Social Studies Learning

Nazarius Riwanto¹, Neiny Ratmaningsih², Muhammad Iqbal³

Social Studies Education Study Program, Faculty of Social Science Education
Universitas Pendidikan Indonesia, Bandung, Indonesia

Abstract. This research is motivated by the problem of the low critical thinking of students in social studies learning in Pasundan 2 Middle School Bandung class VII F. Based on the background of the problem the authors are interested in examining the problems faced by students. The method used in this study is Kemmis And Taggart which is in accordance with class action research (CAR). This research was conducted by applying the problem based learning (PBL) model. Before carrying out the research, the author first made an initial observation, the initial observations were made to look for the problems to be studied, initial observations carried out on Monday 18 September 2018. After the problem was found the writer immediately made a research plan. The study was conducted on Monday 25 September 2018 and ended on October 2, 2018. The number of respondents studied was 33 students. The research was conducted by applying the problem based learning model based on the results of the study showing that the success of applying the model was very good, the students were considered successful in increasing critical thinking in social studies learning.

Keywords: Critical Thinking, Social Sciences, Problem Based Learning.

Correspondence. nazariusriwanto94@gmail.com

Article History. Received July 2019, Received in revised September 2019, Accepted December 2019

©2019. International Journal Pedagogy of Social Studies. Department of Social Studies Education

A. INTRODUCTION

The quality of education cannot be separated from the learning process in class, while the quality of learning can be seen from the aspects of the process of learning outcomes and achievements obtained at school, a good learning process will print students who excel and a good learning process must involve students actively, creatively, and be critical. Meanwhile the educational process in the competitive era of globalization is expected to be able to produce generations. smart and have high morality, and be critical of situations that occur around them. Humans who are creative and brave are the dominant factors that are needed in facing the era of global competition. This study moved from the problem of the low critical thinking skills (critical thinking) Students in learning social studies learning in the classroom, and the problem behind this research, is the still low level of students' critical thinking skills, Jenning and Dune (1999), he stated, have difficulty in applying IPS learning into real life situations, teachers in learning in the class do not associate with the schema students and students have not been given the opportunity to rediscover and construct their

own social studies ideas. Linking real-life experiences of children to social studies ideas in important classroom learning is done so learning is meaningful (Soedjadi, 2000: Pierce, 2012: Zamroni 2000) based on, both theories the writer wants to know as far as the low man critical thinking of students by using 2 cycles with the method of Kemmis and Mc Taggart. One of the right alternative learning methods to be applied in order to improve students' critical thinking skills is through approach (problem based learning) with this approach model the author hopes that critical thinking skills in students can be improved. Critical thinking skills are very important in building a learning class, why it is said to be so, when active students in learning then the ability to capture learning problems will trigger students to think critically. When the learning model. problem-based is applied in the classroom so the learning process in the classroom will be more challenging, and the development of students' mindsets will be more honed. here the researcher intends to observe these problems in the classroom in the learning process takes

place. through the problem based learning (PBL) model, which is problem based learning

The purpose of this study was to determine students' critical thinking abilities. In social studies learning, this research was carried out in class VII F Pasundan 2 Middle School Bandung, seeing and observing that this class was a very suitable class to be studied, researchers also conducted research based on problems found in class. Students in class VII F have potential. good learning but seen from the level of critical thinking in social studies learning is very low, therefore researchers are interested in exploring the problem. Critical thinking skills are very important in everyday life, because to develop other thinking skills, such as the ability to make decisions and solving problems. In everyday life There are so many phenomena that need to be criticized. In the sense that someone who thinks critically is a person who is not satisfied with the answer or subject said by someone else to him, as for some of the notions of critical thinking put forward by many experts. Some of them are: Gunawan, (2003 p. 177-178) states that critical thinking skills are the ability to think on a complex level and use the process of analysis and evaluation.

Critical thinking involves inductive thinking skills such as recognizing relationships, analyzing open problems, determining causes and consequences, drawing conclusions and calculating relevant data. While deductive thinking skills involve the ability to solve spatial, logical syllogistic problems and distinguish facts and opinions. Other critical thinking skills are the ability to detect bias, evaluate, compare and contrast. Meanwhile (Duran, 2016) suggests critical thinking (critical thinking) is synonymous with decision making (decision making), strategic planning (strategic planning), scientific processes (scientific process), and problem solving (problem solving). Juha, (2010, p.1) which states "Critical thinking reasonable, reflective thinking, focused on deciding what to believe or do" Paul, R., & Elder, L. (2016, p. 21) states "Critical thinking is the "Critical thinking contains mental activity in solving problems, analyzing assumptions, giving rational, evaluating, conducting investigations, and taking decision. In the decision making process, the ability to find, analyze and evaluate information is very important. From these two understandings it can be analyzed that. People

who think critically will search, analyze and evaluate information, make conclusions based on facts. then make a decision. Characteristics of people who think critically will always look for and explain the relationship between problems discussed with problems or other relevant experiences. Critical thinking is also an organized process of solving problems that involve mental activities that include the ability: to formulate problems, giving arguments, doing deduction and induction, evaluating, and making decisions. With the problems faced by students researchers think that the model that is suitable for use is the PBL model (problem based learning)

B. METHOD

The method used in this study is a descriptive method from the results of classroom action research (CAR), in the form of special treatment using the problem based learning (PBL) model. The research subjects were students of Pasundan 2 Bandung Middle School class VII F Semester / 2, with a total of 33 students 15 male and 18 female. According to Maolani and Cahaya (2015, p. 11), " research method is a scientific way to obtain data with specific purposes and uses. " In this study the scientific method used to obtain data with specific purposes and uses, namely the author uses the class action research method (PTK), classroom action research is one type of research in a qualitative approach.

Research that primarily uses the knowledge paradigm based on constructivist views (such as plural meanings of individual experience, meanings that are rationally and historically constructed with the intention of developing a theory or pattern) or advocacy / participatory views (such as orientation, politics, issues, collaborative or orientation) change) or both. Then Basrowi & Suwandi (2009, p. 11), adding that "qualitative research prioritizes processes rather than results, this occurs because the relationship of the parts studied will be much clearer if observed in the process" while according to Sanjaya (2009) class action research is included into a qualitative approach, etymologically has three terms related to research, action and class. Research is a problem solving process carried out in a systematic, empirical and controlled manner. Actions are interpreted as certain treatments carried out by researchers, namely

teachers. And the class shows where the learning process takes place. If it is concluded that action research is a research that is a problem-solving process that occurs in class by carrying out various structured actions that have been planned in advance. Stages of research are components of research that determine the process or steps of the research that will be carried out. The flow that is a reference in the implementation of Classroom Action Research (CAR) is as follows:

- 1) Survey or introduction intended to find the problem to be raised in the study.
- 2) Arrange the research design and choose the research location
- 3) Submit permission for observation and research for research at Pasundan 2 Middle School Bandung
- 4) Establish learning materials for each cycle, determine competency standards, basic competencies and core competencies in learning
- 5) Arrange RPP (Learning Implementation Plan), using the method of problem based learning adjusted to the time allocation.
- 6) Determine the class to be examined, here the author focuses on research in class VII F.
- 7) Retrieval of data through each action in the cycle, here the author carries out six actions in three cycles in accordance with the research flow Kemis and Taggart class actions.
- 8) Analyze data results.
- 9) Conclude the results of the study.

Sugiyono (2012, p. 147). Suggests that data analysis is carried out after the required data is collected. Activities in analyzing data are grouping data based on variables from all respondents. Data analysis technique is an analysis technique carried out by the author to measure the results of students' critical thinking in learning, through the problem based learning method of social studies learning. The data is obtained from the results of each cycle that is applied where for one cycle, there are two actions. So 2 cycles have 4 actions that have been applied by the author. The qualitative data analysis technique that the writer uses to analyze the data is using Miles and Huberman, here is a series of analytical techniques used:

Based on the steps of the research carried out the results of the study were analyzed while the analysis of the results of the data obtained were as follows:

Data analysis

Data analysis was conducted to conclude the essence of the overall research carried out there are three stages of data analysis, namely as follows:

- 1) In this research the first cycle carried out with the success of critical thinking in the critical category, students were able to show a critical attitude towards the phenomenon of problems encountered in social life. By applying the problem based learning model students are able to show a critical attitude towards social situations.
- 2) The results achieved in the second cycle of this study show that this very critical student is seen in the results of measurements made through learning.
- 3) Overall the research carried out is successful because based on the data that has been obtained the students are able to show a critical attitude towards the problem.

C. RESULTS AND DISCUSSION

The variable increase in students' critical thinking about the problem is at the end of the second meeting cycle. The results of observations of each cycle that have been prepared before, and the following are the results obtained, Based on the results of the research in the first cycle, II. Students' critical thinking ability increases in each cycle, we can see in each assessment results obtained. The results of the increase between the first cycle, II. Is as follows:

Table 1. Results of Student Learning Ability

No	Test results of students' critical thinking skills	Cycle I	Cycle II
1	Highest score	80,8	88%
2	Lowest score	64	88,8%
3	Maximum score	81,6	84%
4	Average score	78.4	74,4%

5	Category	77,6	88,8%
	Average	75%	83%
	Category	Critical	Critical

Source: data processed through excel 2018

Based on the table above it is clear that in the first cycle the highest score was 391 with an average number of 75% in the critical category, and in the second cycle the highest score was 419 with an average number of 83% in the critical category, so implementation the first and second cycles experience equally critical values. This means that the application of the problem based learning model is suitable for use in Pasundan 2 Middle School in Bandung.

- 1) The results of the table data above the first cycle with action one and action two, get results with an average of 75% of the data obtained based on the results of data processing. On average this falls into the category that students are critical of problems.
- 2) The results of the table data state 83% in the third and fourth actions in the second cycle, this percentage illustrates an increase of 8% from the previous cycle.
- 3) In the first and second cycles the planning of the problem based learning (PBL) model is very good, the model is suitable to be applied. Based on the results of the data obtained, learning progresses on each action that has been designed.
- 4) Implementation of the problem based learning (PBL) model in social studies learning with learning material on the face of the earth, and concept maps of the implementation of the learning model are progressing and can improve students' thinking in solving problems. The progress of learning can be seen in each action carried out in learning.
- 5) The obstacles faced at the time of applying this model are, during the implementation of group learning. But the problem can be overcome by the author in conducting learning in class. The author directs students directly in learning and solving problems together if the problem is felt very difficult by students in the class.
- 6) Based on the data that has been achieved the progress of the increase in the results of the first cycle average of 75% and the

second cycle 83% of the percentage illustrates that the application of the model is above average. The gain is stated to increase and the desired data is felt to be saturated.

Based on the two cycles stated that the average percentage increase in critical thinking students is above the average that the writer wants. In the first cycle the constraints faced were the application of the immature model of the preparation, but it was fixed again at the second cycle by preparing more mature learning and ultimately getting a higher percentage. The increase is in accordance with the desired expectations. Besides measuring ability levels. Critical thinking of students in learning the author also measures student learning activities in the classroom whether students in learning are in the good category or vice versa. The following are the results achieved from the first and second cycles. So based on the results of the second cycle with 4 actions 1 which was carried out on September 25 and the second action held on Tuesday, September 26, 2018. For the second cycle, the first action will be held on Monday, October 1, 2018 and the second action on Tuesday October 2, 2018. The results obtained are based on data processing and the results of interviews with other sources like social studies teachers themselves, proving that the Problem Based Learning (PBL) model in social studies learning at Pasundan 2 Middle School Bandung suitable. By looking at learning procedures that hone students' thinking skills in problem solving, this model is very suitable to be applied.

- 1) The range of scoring ranges from the bar diagram illustrates the percentage of students' critical thinking abilities with the frequency of the level of student activeness reaching 77% and the ability to express opinions reaching 79%, the range of these two frequencies is 2%. The cause of the 2% range lies in learning preparation that is still immature but can be overcome by preparing more mature learning.
- 2) While the range of 79% to 80% in the measurement of the 2% measurement and psychomotor is based on the results of the diagram above. There are several obstacles faced by students in understanding affective and psychomotor. As it is less able to explain

the material that has been delivered and has not fully understood.

- 3) Increasing the distance between the affective and psychomotor ranges of scores reaching 4% with a percentage of 80% to 83% this increase is very significant. This means that students' abilities look good. At this achievement the value of students increases the application of learning material that was previously developed then the value of students also increases based on the data obtained.

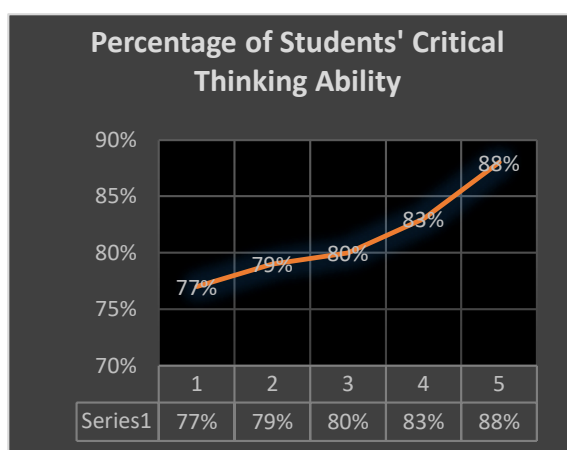


Figure 1. Percentage of Students' Critical Thinking Ability

- 4) Psychomotor 83% with a 5% scale compared to the cognitive 88% range of 5%. The factors that cause this percentage increase are by changing learning by group learning. Students who study in groups will be seen learning collaboration in the group.

Based on the results of the first and second cycle research, with 4 x actions then based on the research objectives to be achieved are:

- 1) Planning to improve students' critical thinking through a problem based learning (PBL) model in social studies learning. Successful planning of the Problem Based Learning (PBL) in social studies in Pasundan 2 Bandung Middle School falls into a very good category, the learning planning process such as making syllabus, RPP, learning media, making test questions, inviting students to study in groups to assess teacher activities in

teaching. A series of props used are very good in the implementation process in class.

- 2) Implementation of the problem based learning (PBL) model to improve students' critical thinking in social studies learning. The successful implementation of the Problem Based Learning (PBL) model in social studies learning in Pasundan 2 Middle School Bandung, falls into the very good category in class implementation. The results that have been achieved through the implementation of 75% on the first cycle of actions 1 and 2, while 83% the results of the implementation of the second cycle with the 3rd and 4th actions. The results of the implementation of teacher activity teaching evaluations fall into the very good category.
- 3) Constraints faced by students towards the low level of critical thinking in social studies learning. In addition to the success in research, of course they have obstacles faced in the field, while the obstacles faced when the authors conduct research such as lack of implementation of learning material in the classroom due to the limited time given. But these obstacles can be overcome.

- 4) Improvement of student social studies learning outcomes can be improved through the application of problem-based learning (PBL) models assisted by learning media. In addition to the successes and constraints faced during the study the authors also measured the extent to which students' learning outcomes and critical thinking levels occurred during the Problem Based Learning model (PBL) in social studies learning at Pasundan 2 Middle School in Bandung. The results.

Improvement of students' critical thinking during the first cycle of learning 75% and the second cycle 83%, while the learning activities of students on the first cycle 86.6% included in the good learning category, and in the second cycle evenly 88.2% is in the good category, the results are obtained through the assessment of student learning activities in the class.

Table 2. Assessment of student learning activities in the class

Indicator	Total score	Percentage	Description
Active	110	88%	critical
KMP	111	88,8%	critical
Affective	105	84%	critical
Psychomot or Cognitive	93 111	74,4% 88,8%	critical
total score of 530	Average 83%	Category (critical)	

Based on the formulation of the problem to be achieved through 2 cycles of research and 4 actions in accordance with Kemmis and Mc Taggart that, based on these results the conclusions from the whole series of studies above that, the application of the Problem Based Learning model (PBL) in social studies learning at Pasundan 2 Middle School Bandung suitable. Because based on the data that has been obtained produces an increase in each cycle.

D. CONCLUSION

Class action research is a study to correct errors in learning, classroom action research also improves quality learning. The results of the study illustrate the increase in the first cycle and even the second. In accordance with the rules of classroom action research, if the quality of learning is felt to increase and without decline it means that the research is stopped because the data is saturated. Based on these results the increase in critical thinking of students was declared successful. So from that research conducted by the author at Pasundan 2 Middle School Bandung considered successful because it uses learning media that can enhance students' critical thinking in learning. Thank you, the writer said to the Pasundan 2 Bandung

Middle School that allowed the author to carry out research at the school.

REFERENCES

- Basrowi dan Suwandi. (2008). *Memahami Penelitian Kualitatif*. Jakarta: Rineka Cipta.
- Duran, Robert. dkk., (2006). Critical Thinking Framework for Any Discipline. dalam *International Journal of Teaching and Learning in Higher Education* 2006, Vol. 17, Number 2, 160-166.
- Hamalik, O. (2001). *Perancangan pengajaran berdasarkan pendekatan sistem*. Jakarta: Bumi Aksara
- Jennings, Sue & R, Dunne. 1999. *Math Stories, Real Stories, Real-life Stories*. <http://www.ex.ac.uk/telematics/T3/math/s/actar01.htm>.
- Juha, Mervat Amin. (2010). *Thinking Skills Critical Thinking- 2 Chapter*. Zaid .IQ
- Paul, R., Elder, L. (2006). *Critical Thinking : Concepts and Tools*. www.criticalthinking.org . 09 Maret 2016.
- Pierce, B. A. (2012). *Genetics (Fourth Edition): A Conceptual Approach*. New York: W.H Freeman and company
- Sanjaya, W. (2009). *Strategi Pembelajaran Berorientasi Standar Proses pendidikan*. Kencana. Jakarta.
- Sugiyono. (2012). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif, dan R&D*. Alfabeta: Bandung
- Soedjadi. (2000). *Kiat Pendidikan Matematika di Indonesia*. Jakarta: Direktorat Jendral Pendidikan Tinggi Departemen Pendidikan Nasional.
- Zamroni, S. (2016) *Peningkatan hasil dan aktivitas belajar ips model problem-based learning berbantuan media smpn 2 kawunganten*, Yogyakarta