

The Application of the Project Based Learning Model to Improve the Capability of Students in Determining the Location of a Region Through Map Making

Journal of Islamicate Studies, Vol. 4 No. 2, 2021, pp: 62-71 http://journal.islamicateinstitute.co.id/index.php/jois DOI: https://doi.org/10.32506/jois.v4i2.708





Mamat Rahmat

SMPN 2 Rancaekek Bandung mamatrahmat1819@gmail.com

Received: 2021-08-15 | Accepted: 2021-09-09 | Published: 2021-12-13

Abstract

The problems behind this classroom action research include: (1) Students' understanding of the material being taught; particularly on Understanding Determining Geographical Locations through Maps, is still low; (2) The ability of students to explain the concept of space (location, distribution, potential, climate, shape of the earth, geology, flora, and fauna) and interactions between spaces in Indonesia in economic, social, cultural, and educational aspects. in social studies learning is not optimal.; And (3) active participation of students in learning is still weak. According to the problem, the effort to fix it is through: (1) Learning improvement activities with Collaborative Classroom Action Research (PTKK) 2 (two) cycles of social studies subjects; (2) Implementing innovative, creative, effective, and interesting learning by using the Project Based Learning (PjBL) learning model; And (3) Carry out learning activities on Understanding Determining Geographical Locations through Maps by applying the expository method; question and answer; work in group; observation; discussion The results of CAR activities in Social Studies subjects can be stated to be carried out with procedures and activity steps in 2 (two) cycles very well. This was proven, among others: (1) almost all of the students or 97.5% scored above the KKM (75) with an average score (students' Cognitive Mean) of 85.25; (2) Skill level of students according to KD entirely or 99.38% of students skilled in the basic competence of Understanding Determining Geographical Locations through Maps with very good qualifications. And (3) the level of active participation of students in learning reached 93.08% which was declared very high.

Keywords: Determining Geographical Locations through Maps, Project Based Learning (PjBL) classroom action research, Social Science Lessons.

INTRODUCTION

Social studies teachers, in addition to teaching, in addition to presenting theoretical learning, need to train students' abilities about making location maps. Geographical location of an administrative area. In fact, there are still many social studies teachers who tend to pursue curriculum targets, and lack teaching skills in social studies learning activities that are considered important in everyday life, especially at the junior high school level. As a result, students lack the ability to make location maps. Geographical location of an administrative area. The above is a problem in the social studies learning process.

To overcome this problem, we will try to research through classroom action research. From the results of temporary observations, it turns out that the problems of the process of learning the concept of space (location, distribution, potential, climate, shape of the earth, geology, flora, and fauna) and interactions between spaces in Indonesia in junior high school Negeri 2 Rancaekek is less satisfactory than other classes. This needs to be taken seriously.

Based on the background of the problem above, the problem will be formulated as follows.

- 1) Can the Project Based Learning (PjBL) learning model improve students' mastery of determining geographic locations through maps in class VII-C of SMP Negeri 2 Rancaekek;
- 2) Can the Project Based Learning (PjBL) learning model improve the ability of students in making location maps Geographical location of an administrative area in class VII-C of SMP Negeri 2 Rancaekek; and
- 3) Can applying classroom action solve the problem of learning the concept of space (location, distribution, potential, climate, shape of the earth's surface, geology, flora, and fauna) and interaction between spaces in Indonesia in social studies subjects?

The purpose of this classroom action research is to. Applying predictable actions can solve learning problems about Determining Geographical Locations through Maps, Making location maps Geographical location of an administrative area, and the concept of space (location, distribution, potential, climate, shape of the earth, geology, flora, and fauna) and interaction between spaces in Indonesia in social studies subjects

Theoretical basis

The basic concept of Determining Geographical Locations through Maps is one of the studies of social studies teaching materials in grade VII SMP. Is knowledge in basic competence 3.1, namely Understanding the concept of space (location, distribution, potential, climate, shape of the earth's surface, geology, flora, and fauna) and interactions between spaces in Indonesia and their influence on human life in economic, social, cultural, and social aspects. and education.; and Skills 4.1 Explain the concept of space (location, distribution, potential, climate, shape of the earth's surface, geology, flora, and fauna) and the interaction between spaces in Indonesia and their influence on Indonesian human life in economic, social, cultural, and educational aspects. That is, determining the location of a geographic location through making maps.

Theoretically, a map consists of several components. The components of the arrangement consist of the map title, map scale, north orientation, map symbols, astronomical lines, insets, legends, and map sources. The location of a place can be seen on a map. A map is a picture of the earth's surface on a flat plane and reduced by using a scale. On the map there is a number of accompanying information. We must be able to read the map in order to obtain various information needed. (Setiawan, et al., 2016: 7)

The Project Based Learning (PjBL) learning model according to the Indonesian Ministry of Education and Culture (2013: 1) "is a learning model that involves students in an activity (project) that produces a product. Student involvement starts from planning, designing, implementing, and reporting the results of activities in the form of products and implementation reports, and PjBL is designed to be used on complex problems that students need to investigate and understand.

Through PjBL, the inquiry process begins by raising a guiding question and guiding students in a collaborative project that integrates various subjects (materials) in the curriculum. According to

BPSDM & PMP Dikbud (2014: 1) PjBL is a learning method that uses problems as a first step in collecting and integrating new knowledge based on experience in real activities.

The characteristics of the Project Based Learning (PjBL) learning model proposed by the Ministry of Education and Culture of the Republic of Indonesia (2013: 2) are emphasizing the long-term learning process, students are directly involved (student centered), investigation, collaboration, and integration, issues and problems real, everyday life, interdisciplinary in nature, investigation, collaboration, and information integration, and an activity (project) that produces a product

The steps for implementing the Project Based Learning (PjBL) learning model were proposed by BPSDM & PMP Dikbud RI, (2014. 5-8) "There are six steps or syntax, namely: (1) Start With the Essential Question (Determining Questions). Fundamental); (2) Designing Project Plan (Designing Project Planning); (3) Creating Schedule; (4) Monitor the Students and the Progress of the Project (monitor students and project progress); (5) Assess the Outcome (Test the results); (6) Evaluate the Experience).

CAR is research that requires action to overcome problems in the field of education and is carried out in a classroom or school area with the aim of improving data or improving the quality of learning. Classroom Action Research (CAR) is one of the efforts of teachers or practitioners in the form of various activities carried out to improve and or improve the quality of learning in the classroom" (Kasbolah, 2014: 13).

Classroom action research is an activity that is directly related to the teacher's duties in the field. In short, classroom action research is practical research conducted in the classroom and aims to improve existing learning. As according to Iskandar, (2015: 2) CAR must be done by the teacher with the problems encountered in the class where he teaches on a daily basis and of course according to the subject matter being taught.

Thus, it can be stated that classroom research or often called CAR is practical research carried out in the classroom as one of the teacher's efforts to improve and or improve the quality of learning which is directly related to the teacher's duties in the field.

CAR as one of the types of scientific writing as a means to develop methods, media, and learning models. Iskandar, (2015: 10) CAR as one of the types of scientific writing has a fundamental function, namely being a means to develop methods, media, and learning models.

The main purpose of CAR is to improve the learning process and learning outcomes. As stated by Arikunto. (2006:21). The purpose of action research is to solve problems through a real action, not just looking at the phenomenon in question. In simple terms in this study, the purpose of CAR refers to the opinion of Kasbolah, (2014:21) which states "The ultimate goal of CAR is to improve (1) the quality of learning practices in schools, (2) the relevance of education; (3) the quality of educational outcomes; (4) education management deficiency.

As for the CAR steps, Kasbolalah put forward (2014: 44). "The flow of the implementation of the class action in question is as follows: (1) planning the action, (2) carrying out the action, (3) carrying out observations, and (4) reflecting"

From the thoughts above, the authors propose the following hypotheses, "The ability of students in Understanding Determining Geographical Locations through Maps and Making location maps The geographical location of an administrative area can be increased, if applied with the Project Based Learning (PjBL) learning model)."

METHOD

This research uses classroom action research (CAR). The procedure for classroom action research on social studies learning through Project Based Learning (PjBL) at VII-C SMP Negeri 2 Rancaekek will be carried out for up to 2 (two) cycles. In each cycle, there are two meetings. Each cycle has four phases which include (1) planning CAR, (2) implementing CAR, (3) observing, and (4) reflecting. The four phases are planned and implemented to improve student learning outcomes in social studies learning by using the Project Based Learning (PjBL) learning model.

The data collection techniques used in this CAR are: Documentation study techniques, trial techniques, observations, interviews and test techniques.

The quantitative data analysis technique used in this study was to find the difference in the results of the second cycle of the second meeting minus the results of the first cycle of the first meeting. "The test results of the second cycle of the second meeting are posttest and the results of the first cycle of the first meeting are pretest. The difference between the two is the result of learning." (2012:84) The criteria for success are increasing mastery of the material, and the ability of students in concepts.

The determination of cognitive criteria uses a reference from Arikunto (2010: 246) with a range of values as follows. Criterion (A) Score 86 -100 very good qualification; Criterion (B) Score 71 - 85 good qualification; Criterion (C) Score 56 - 70 sufficient qualification; Criterion (D) Less score 40 - 55 less qualification.

RESULT AND DISCUSSION

1) Quantitative Data on Student Learning Outcomes Cycle I

From the quantitative data on the results of the assessment of students' learning achievement on Understanding Determining Geographical Locations through Maps in Social Studies lessons, it can be reflected as follows: First: The class average value (mean) of 74.38 (below the KKM 75) is reflected that it has not achieved minimum completeness on social studies subjects. However, the grades of VII-C students who achieved scores above the KKM were 29 students or 72.5%, it was reflected that the learning outcomes had not yet reached the 75% completeness level. Thus, students of class VII-C of SMP Negeri 2 Rancaekek have not yet achieved the completeness of learning social studies subjects about basic competencies. Understanding the concept of space (location, distribution, potential, climate, shape of the earth, geology, flora, and fauna).

Second: The results of the analysis of the achievement of skills on each indicator by the entire group can be explained that the total average score that has been achieved by all indicators is 81.16. When

compared with the PBM score (75), there is an excess of 6.16 scores. Thus, students' skills in explaining the concept of space (location, distribution, potential, climate, shape of the earth, geology, flora, and fauna) by making a map of the geographical location of the administrative area. in Cycle I PTK can be declared to have exceeded PBM.

Tthat there has been success in achieving PBM scores. Skill qualifications reach good category.

Thirds: The results of the observation of attitudes in the first cycle based on the mode of qualification of the attitudes of students can be explained by the average value (mean) of attitudes in following the learning process of 78, and the level of attitude development of 82.58 %, it can be reflected in the attitudes of students in the learning process. Toggle Geographic Location via Map otherwise mostly good.

Based on the description of the data found in the first cycle above, it can be reflected that: the understanding and ability of students about Determining Geographical Locations through Maps, there are several indicators that are a problem and the causes and solutions must be sought, including: indicator 2 which is about practice Application of map preparation components; and indicator 3, namely the practice of applying a map scale to an area;

For this reason, it is necessary to carry out follow-up actions in cycle II as a solution. The researcher improved the first cycle lesson plan and it will be used as the second cycle lesson plan with the emphasis on increasing students' abilities about: Explaining the concept of space (location, distribution, potential, climate, earth's shape, geology, flora, and fauna) with decisive skills Geographic Location via Map. through the application of Project Based Learning (PjBL) in social studies subjects:

The results of the observation of attitudes in the first cycle based on the mode of qualification of the attitudes of students can be explained by the average value (mean) of attitudes in following the learning process of 78, and the level of attitude development of 82.58%, it can be reflected in the attitudes of students in the learning process. Toggle Geographic Location via Map otherwise mostly good.

Based on the description of the data found in the first cycle above, it can be reflected that: the understanding and ability of students about Determining Geographical Locations through Maps, there are several indicators that are a problem and the causes and solutions must be sought, including: indicator 2 which is about practice Application of map preparation components; and indicator 3, namely the practice of applying a map scale to an area;

For this reason, it is necessary to carry out follow-up actions in cycle II as a solution. The researcher improved the first cycle lesson plan and it will be used as the second cycle lesson plan with the emphasis on increasing students' abilities about: Explaining the concept of space (location, distribution, potential, climate, earth's shape, geology, flora, and fauna) with decisive skills Geographic Location via Map. through the application of Project Based Learning (PjBL) in social studies subjects.

2) Quantitative Data on Understanding Achievement in Cycle II

From the quantitative data on the results of the achievement assessment of basic competencies, the ability to determine geographic locations through maps in social studies lessons can be reflected as follows:

First: The average grade of understanding (mean) of 84.38 (above the KKM 75) is reflected in having achieved minimum completeness in social studies subjects. Thus, the value of students in class VII-C who achieved a value above the PBM as many as 39 students or 97.5%, reflected the learning outcomes had reached a class completeness level of 75%. Thus, students of class VII-C of SMP Negeri 2 Rancaekek have achieved mastery in learning social studies subjects about basic competencies. Understanding the concept of space (location, distribution, potential, climate, shape of the earth, geology, flora, and fauna) determines. Geographic Locations through Maps in Social Studies lessons.

The results of the analysis of the achievement of skills on each indicator by the entire group can be explained by the total average score that has been achieved by all indicators is 90.53. When compared with the KKM score (75), there is an excess score of 15.53 scores.

Thus, students' skills about making maps to determine. Geographical location of the administrative area in the second cycle of PTK can be declared to have exceeded the PBM. This explanation shows that there has been success in achieving PBM scores. Skill qualifications reach the very good category.

The results of observing attitudes in the first cycle based on the mode of qualification of the attitudes of students can be explained by the average value (mean) of attitudes in following the learning process of 88.13, and the level of attitude development of 93.08%, it can be reflected in the attitudes of students in the learning process. Geographic Location via Map is stated almost entirely Very good.

Based on the description of the data found in cycle 2 above, it can be reflected that: the understanding and ability of students in social studies learning can be qualified very well, there is an increase in understanding, describing abilities, and developing attitudes in Determining Geographical Locations through Map.

This is evidenced by the aspect of understanding reaching a class completeness level of 97.5%. The skill aspect reaches the class completeness level, which is 90.53%, if qualified, it has exceeded the class completeness. In addition, from the aspect of individual student abilities, it appears that they have achieved an average score of 81.25, or all (99.375%), which can be reflected in very high qualifications. Likewise, the level of attitude development is 93.08% with a level of qualification almost entirely Very good. So that the CAR for IPS subjects is considered complete until cycle 2.

Discussion

The implementation of action research on social studies subjects can be expressed as action research in class VII SMP Negeri 2 Rancaekek which is carried out with 2 cycles of action activities to solve problems in social studies learning, through a learning process using the Project Based Learning (PjBL) learning model.

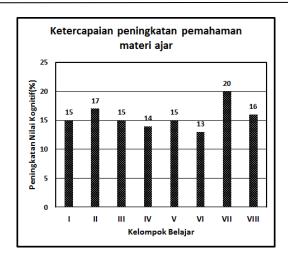
The learning improvement process can be stated to be running well and has a high CBSA level in accordance with innovative, interactive and creative learning steps in meaningful learning. This is evidenced by: The procedure for the preparation of classroom action research is in accordance with the plan and stated that 93.33% of the qualifications are very good. It was stated that 95% of the

qualifications were very good, and had followed the correct CAR procedures and the steps (Syntax) of the Project Based Learning (PjBL) model that were implemented correctly. Cognitive achievement Learners achieve completeness of 97.5%. The skill level reaches 90.53% with very good qualifications.

Tabel 1
Obtaining the understanding value of cycles I and II

kelompok	pretes	siklus 1	siklus II	Selisih	peningkatan
	67	76	82	15	22.4
	64	72	81	17	26.6
	70	76	85	15	21.4
V	68	71	82	14	20.6
/	71	77	86	15	21.1
/I	69	71	82	13	18.8
/II	68	75	88	20	29.4
VIII VIII	73	77	89	16	21.9
Jumlah	550	595	675	125	
Rata2 (Mean)	68.8	74.4	84.4	15.6	22.7
ingkat Ketuntasan	37.5	72.5	97.5		%

Table 1 above shows: (1) The difference between the average score of the pretest and the average value of the second cycle of group I is 15 or there has been an increase in learning outcomes of 22.30%; (2) The difference in the average score of group II is 17 or there has been an increase in learning outcomes by 26.56%; (3) The difference in the average score of group III is 15 or there has been an increase in learning outcomes by 21.43%; (4) The difference in the average score of group IV is 14 or there has been an increase in learning outcomes of 20.59%; (5) The difference in the average score of group V is 15 or there has been an increase in learning outcomes of 21.13%; (6) The difference in the average score of group VII is 13 or there has been an increase in learning outcomes of 18.84%; (7) The difference in the average score of group VIII is 20 or there has been an increase in learning outcomes by 29.41%; (8) The difference in the average score of group VIII is 16 or there has been an increase in learning outcomes of 21.92%. The average increase in understanding of learning outcomes is 84.38 minus 68.75 which is 15.63 or an increase of 22.73%.



Grafik 1 Achievement of increasing understanding of teaching materials

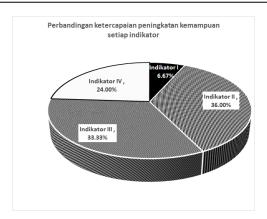
The following is the data analysis results regarding the achievement of the ability to determine Geographical Locations through Maps. from each group of students in the first cycle of the first meeting and the second cycle of the second meeting in table 2 below.

Siklus I Siklus II Selisih Peningkatan (%) Kemampuan Indikator 1 98 100 2.50 2.56 75 88 13.50 18.12 Indikator 2 Indikator 3 73 86 12.50 17.09 80 89 9.00 11.32 Indikator 4 Rata-rata 81 91 9.38 11.55

Table 2. Average Skills Cycle I & II

Table 2 above shows: (1) The difference between indicator 1 and 2.5 or an increase of 2.56%; (2) The difference between indicator 2 and 13.5 or an increase of 18.12%; (3) The difference between indicator 3 and 12.5 or an increase of 17.09%; . (4) The difference between indicator 4 and 9 is an increase of 11.32%. Globally, the difference between the average and the average is 9.38 or an increase of 11.55%.

Next, the researcher will determine the comparison of the achievement of all indicators through the level of achievement as follows. The comparison of the achievement of each indicator between indicator 1: indicator 2: indicator 3: indicator 4 is 2.5: 13.5:12.5: 9 total 37.5. Each number of achievement of each indicator is divided by 37.5 and then multiplied by 100. The result of processing these numbers is a comparison of the achievement of indicator number 1: 2: 3: 4 is 6.67% : 36% : 33.33%: 24% Total 100%.



Graph 4.6 Comparison of the achievement of capacity building for each indicator

Based on the discussion of the results of the analysis above, it can be shown that the hypotheses in this classroom action research are: "The ability of students in Understanding Determining Geographical Locations through Maps and Making location maps The geographical location of an administrative area can be increased, if applied with the Project Based Learning learning model. (PjBL)." proved to be quite significant.

CONCLUSION

Based on the results of the social studies class action research that has been carried out, several conclusions and suggestions are made as research inputs to be recommended and followed up. The conclusions and suggestions are as follows:

- 1) There has been an increase in students' understanding of Understanding the concept of space (location, distribution, potential, climate, shape of the earth's surface, geology, flora, and fauna) and inter-space interactions in Indonesia and their influence on Indonesian human life in economic, social, cultural aspects , and education. This is evidenced by the CAR results, namely: The average value of understanding in the second cycle is 84.38, and the difference with the pretest score (68.75) is 15.63 or an increase of 22.73% which is a significant increase in learning outcomes.
- 2) There has been an average increase in the overall ability of students' learning outcomes regarding the skills of determining Geographical Locations through Maps in class VII-C students of SMP Negeri 2 Rancaekek as evidenced by the average ability score in the first cycle of 81.16 and the average value of the ability in the second cycle is 90.53, the difference is 9.38, or the percentage increase of 11.55% is a significant increase in the ability of learning outcomes.
- 3) The implementation of classroom action research on social studies subjects through a learning process using the Project Based Learning (PjBL) learning model can solve problems in social studies learning, this is evidenced by: The preparation procedure is stated to be 93.33% with very good qualifications. The implementation is stated to be 95% with very good qualifications. And the level of active participation of students in learning reaches 93.08% which is declared very high.

Suggestion

It is recommended that the Project Based Learning (PjBL) learning model can be used in contextual teaching materials by using adequate media according to the needs for developing the potential of students and carried out in an adequate time, accompanied by more accurate indicators of measuring success rates to obtain results. significant research.

REFERENCES

Arikunto, S., dkk. (2012) Penelitian Tindakan Kelas. Jakarta: Bumi Aksara

BPSDM & PMP Dikbud RI , (2014) Model Pembelajaran Berbasis Proyek Project Based Learning. Jakarta: Badan Pengembangan SDM Dikbud dan Penjaminan Mutu Pendidikan.

Depdikbud, RI. (2002) Pembelajaran Kontekstual, Jakarta: Depdiknas RI

Iskandar, D. dan Narsim. (2015) Penelitian Tindakan Kelas dan Publikasinya . Untuk Kenaikan Pangkat dan Golongan Guru & Pedoman Penulisan PTK bagi Mahasiswa.Cilacap: Ihya Media

Kasbolah, K. dan I Wayan S. (2014) Penelitian Tindakan Kelas PTK Eds.3. Malang: UM Press-Universitas Negeri Malang

Kemendikbud RI, (2013). Model Pembelajaran Berbasis Proyek Project Based Learning. Jakarta: Kemen-trian Pendidikan Dan Kebudayaan RI

Kemendiknas RI, (2013) Kurikulum 2013. Jakarta: Depdiknas RI.

Setiawan, dkk.. (2016) Ilmu Pengetahuan Sosial Untuk SMP/MTs Kelas VII. Edisi Revisi. Jakarta: Kementerian Pendidikan dan Kebudayaan RI.

Undang-undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional, Jakarta: Depdiknas RI Wardani, I.G.A.K, (2006) Penelitian Tindakan kelas. Jakarta: Pusat Penerbitan Universitas Terbuka