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Improving learning achievement of Civics material on the function of Pancasila as an adhesive for national unity by using the discovery method

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Abstract

The purpose of this study is to increase the level of students' understanding of the function of Pancasila which is the theme of learning through classroom action research. The subjects in this study were 7th graders at SDN Balongwangi III, Tikung District, Lamongan Regency. The author's consideration of taking the research subject is that fifth grade students can increase the motivation and achievement of Civics learning with the Discovery learning method. The results of the study found that the use of the discovery learning method was able to improve Civics learning abilities. By using the discovery method, Civics learning outcomes increased from the average in cycle 1 which was only 69, in cycle 2 to 85. This increase in learning outcomes was obtained after students were directly involved in the process of finding problems presented by the teacher. This hands-on experience makes students enthusiastic about learning.

Keyword: civic education, function of Pancasila, discovery method

Introduction

The invention technique is a translation of the invention. According to Hosnan (2014) in Susana (2012) discovery learning is a model for developing active learning by finding oneself, investigating oneself, then the results obtained will be loyal and long-lasting in memory. According to Sund, Discovery is a mental process where students are able to assimilate a concept or principle. What is meant by mental processes include: observing, digesting, understanding, classifying, making assumptions, explaining, measuring, drawing conclusions and so on. One concept is for example: triangle, Pancasila, democracy and so on, while what is meant by principle include: metal when heated will expand.

According to Suyono and Hariyanto (2012) the method is all planning and procedures as well as the steps of learning activities and the selection of assessment methods that will be carried out in the learning process. According to Sanjaya (Suprihartiningrum 2014), the method is the method used to implement the plans that have been prepared with real activities so that the goals that have been prepared are achieved optimally. Meanwhile, according to Knowles (Sudjana, 2005:18) method is organizing students in an effort to achieve learning objectives. The method is a way to carry out activities systematically from an environment consisting of teachers and students to interact with each other in carrying out an activity so that the teaching and learning process goes well and learning objectives are achieved (Muslich, 2007). Furthermore, according to Widja (Trianto 2009) suggests that the method is a method or technique which is a means of supporting the implementation of learning strategies. And know student learning outcomes well. The definition of the method according to some educational experts is not the same. But these differences will add to our insight into knowledge about the method. The method is a method or procedure that is successful in the teaching and learning process with the maturity of students and the ability of teachers with the aim of making learning more effective (Wahab, 2012). In this regard, Winarto (Suryosubroto, 2009) asserts that methods are ways of implementing the teaching process or a matter of how technically lesson materials are given to students at school. In this

technique students are left to find themselves or experience the mental process itself, the teacher only guides and provides information.

By using this discovery technique, the teacher tries to increase the activity of students in the teaching and learning process. So this technique has the following advantages:

1. This technique is able to help students to develop, improve readiness, and mastery of skills in cognitive processes / student recognition.
2. Students gain knowledge that is very personal, individual so that it can be deeply embedded in students' souls. Can inspire the spirit of learning and teaching students
3. This technique is able to provide opportunities for students to develop and advance according to their respective abilities.
4. Able to direct the way students learn, so they have a strong motivation to study harder.
5. Helping students to strengthen and increase their self-confidence through self-discovery.

This strategy is student-centered rather than teacher-centered. Teachers are just friends. In using the discovery learning method, the teacher tries to increase student activity in the teaching and learning process. So this method has the following advantages: 1) This method is able to help students to develop, improve readiness, and mastery of skills in the cognitive process / student recognition. 2) Students gain knowledge that is very personal and individual so that it can be deeply embedded in students' souls. 3) Can arouse the spirit of teaching and learning in students. 4) This method is able to provide opportunities for students to develop and advance according to their respective abilities. 5) Able to direct the way students learn, so they have a strong motivation to study harder. 6) Helping students strengthen and increase self-confidence through self-discovery. The strategy is student-centered rather than teacher-centered. The teacher is only a study buddy or as a facilitator, guiding students in teaching and learning activities.

Civic Education is a subject that focuses on the formation of a nation that is diverse in religion, socio-culture, language, age, and ethnicity to become intelligent, skilled, and characterized Indonesian citizens based on Pancasila and the 1945 Constitution. Based on this understanding, Civic Education has a vision, namely to realize an educational process that is directed at developing individual abilities to become intelligent, participatory, and responsible citizens, which in turn is able to support the development of intelligent people's lives. Indonesian nation and state. Meanwhile, to be able to realize this vision, Civic Education carries out the following missions:

1. Utilizing the reality and trends of an increasingly transparent society, increasingly pressing demands for quality control, and an increasingly intense and widespread democratic process as context and orientation in democratic education.
2. Utilizing the substance of various relevant disciplines as a pedagogical vehicle to produce instructional impacts and their accompaniment in the form of insights, attitudes, and civic skills, so that interdisciplinary curriculum designs can be produced.
3. Utilizing various concepts, principles, and learning procedures that enable students to be able to learn democracy, in a democratic atmosphere, and improve the quality of life of a more democratic society.

Teaching and learning activities using the discovery method were carried out well, accompanied by a question and answer method during presentations, which were adapted to the situation and conditions, demanding adequate preparation of learning by both teachers and students. Every teacher must be prepared with various problems that will be used as discussion material for students. With careful preparation from the teacher, the implementation of the discovery method will be able to run according to a predetermined plan. Teacher readiness does not mean much if it is not balanced with the readiness of students in carrying out teaching and learning activities. With various problems that have been prepared by the teacher will force students to participate actively in the learning process. So that students can participate actively and creatively in the learning process, every student is required to prepare themselves as well as possible. The preparation in question is a variety of sources that can support solving the problems being discussed, as well as self or mental preparation of each group member to be able to make presentations in front of the class. Student learning outcomes are all forms

of behavior change as a whole, both concerning the cognitive, affective, and psychomotor domains obtained by students after participating in learning activities.

If every student always prepares themselves well in participating in teaching and learning activities, this is evidence that student participation is increasing. Increased participation is accompanied by the student self - preparation before participating in learning activities, it can be said that student learning motivation also increases. With higher motivation, students will always be ready to take part in teaching and learning activities. If teaching and learning activities are always followed properly, it is expected to improve learning achievement. The increase in learning achievement is indicated by the increase in the number of scores obtained by students at the time of evaluation. Thus, if learning activities are carried out using the discovery method followed by a question and answer method when the presentation can be carried out according to a predetermined plan, it is expected that student learning achievement will increase.

Method

The subjects in this study were 7th graders at SDN Balongwangi III, Tikung District, Lamongan Regency. The author's consideration of taking the research subject is that fifth grade students can increase the motivation and achievement of Civics learning with the Discovery learning method. Because grade 5 students feel they have been able to assimilate a concept or principle and can experience the mental process itself. While the teacher only guides and gives instructions. In this study, the authors took the location at SDN Balongwangi III, Tikung District, Lamongan Regency and more precisely in the fifth grade room with 7 students. The author took this place or location with the consideration of working in schools. So that it can make it easier to find data, with broad time opportunities and research subjects that are very in line with the author's profession. With several considerations and reasons, the author determines in using the assessment time of approximately 1 month, namely in September, namely in the first semester of the 2018/2019 academic year.

Results

The data needed in this study were obtained through observation of a collection of discovery-discovery learning process, observations of student and teacher activities, interviews, and formative tests. To analyze the success rate or percentage of student success after the teaching and learning process in each round, it is done by providing an evaluation in the form of written test questions at the end of each round. This analysis calculates using simple statistics. The results of the research conducted on fifth grade students of SDN Balongwangi III, Tikung District, Lamongan Regency related to the results of PKN learning about the function of Pancasila as the glue of national unity through the Discovery learning method which was carried out in improving learning in cycle I and cycle II were fully described as follows. :

Cycle I

The improvement of learning cycle I was carried out on Thursday, September 6, 2018 with the object of class V students in the first semester of SD Negeri Balongwangi III, Tikung District, Lamongan Regency with a total of 7 students. With the help of colleagues who act as observers, the researcher carried out according to the plan. The learning scenario is going well. At the end of the study, the researcher evaluates the learning outcomes to determine the level of success. The activities and learning outcomes of the cycle I am presented in tables 1, 2 and 3 as follows:

Table 1. Teacher activity observation sheet

No	Observed teacher activity	A(3)	B(2)	C(3)
	Initial activity			
1	The teacher attends and conditions students	√		
2	The teacher opens the lesson	√		
3	The teacher asks questions about the function of Pancasila as the glue of national unity			√

4	The teacher gives an initial determination of the function of Pancasila as the glue of national unity			√
5	The teacher gives examples of answering questions about the function of Pancasila as the glue of national unity for students.		√	
	Core activities			
1	The teacher provides learning materials	√		
2	The teacher motivates students to ask questions		√	
3	Interaction provided by teacher and students		√	
4	The teacher explains about the *discovery method of* creating interesting learning for students	√		
5	Giving tests for students		√	
6	The teacher asks students to correct the results of the work that has been written		√	
	Closing Activities			
1	The teacher helps students to reflect after the lesson ends			√
2	The teacher closes the lesson		√	

Information

A = Good, Score 3
B = Enough, Score 2
C = Less, Score 1

$$\text{Score} = \frac{\text{Total score obtained}}{\text{Total score}} \text{ x } 100\%$$

= 30 / 42 x 100%
= 71.5%

From the table above, the results of the assessment of the implementation of learning carried out by the teacher during the teaching and learning process took place, the assessment score obtained was 71.5%.

Table 2. Student activity data cycle I

No	Student Activities	Total students	Percentage
1	How are the student activities during the lesson?	4	57%
2	Student notes of important things during KBM	4	57%
3	Students ask questions	4	57%
4	How do students respond when learning with the *discovery learning method?*	4	57%
5	How do students respond when the teacher explains the material	4	57%
6	During the teaching and learning process, it looks like discussing or asking the teacher or students	4	57%
7	Motivation of students with the discovery learning method as a learning resource on the material of the function of Pancasila as the glue of national unity	4	57%
8	During KBM, students pay attention to the teacher's explanation	4	57%
9	Student discussion during KBM	4	57%
10	Positive response to the use of *discovery learning methods* of learning	4	57%

	Average	4	57%

The results of the first cycle of student activity research indicate that the indicator of student activity achievement should be 80%, but has not been achieved because it is only 57%. From the results of observations, some students have paid attention to the researcher's explanation, but have difficulty collaborating in discussions, have not used the opportunity to ask optimally.

Table 3. Distribution of test values in cycle I

No. massage	Score	Information	
		T	ST
1	60		√
2	80	√	
3	60		√
4	60		√
5	70	√	
6	80	√	
7	70	√	
Amount	480		
Total Score 480			
Total Ideal Maximum Score 700			
Average Score Reached 69			

Description:
T = Completed
TT = Not Complete
Number of students who completed = 4
Number of students who have not completed = 3
Classical = Unfinished

From table 3 it can be explained that by applying the discovery method the average value of student learning achievement is 69 and is still below the predetermined KKM or 4 students out of 7 students have finished studying. These results indicate that there are still deficiencies in the first cycle and the next cycle needs to be carried out with the more mature preparation. The results of the first cycle evaluation were obtained after the implementation of the first cycle of learning was completed. In the first cycle of learning through the following steps:

Planning

Planning activities are carried out by carrying out activities, namely: Preparing learning plans with the aim of improving cycle I, choosing methods and preparing worksheets that will be used in improving learning. Create and design teacher activity observation sheets and indicators.

Application

The implementation of the first cycle of learning was carried out on Thursday, September 6, 2018 in class V. Teaching and learning activities were in accordance with what was written in the lesson plan.

Observation

At this stage the observer recorded what had happened in the first cycle of learning improved by using an observation sheet. In this process the data obtained that:

- The explanation of the material is very fast so it is not understood by students
- Lack of opportunities for children to ask questions
- The teacher's attention to students is still lacking.

Reflection

The results of the observations/observations were collected and analyzed. From the observations, the teacher reflects to find out the shortcomings, obstacles and obstacles that occur in the learning process. Based on the results of the formative test which showed an increase in the previous learning, but to achieve 75% completeness it had not been achieved. So with this, researchers make improvements to learning to the next stage. The main objectives of enhancing this learning are as follows: 1) Provide material and provide explanations that are easily accepted by students, making it easy to understand the material. 2) Using appropriate and appropriate learning models on the material to be delivered to students. 3) Provide opportunities for students to ask questions related to the material being studied.

Cycle II

The improvement of learning cycle I was carried out on Thursday, September 13, 2018 with the object of class V students in the first semester of SD Negeri Balongwangi III, Tikung District, Lamongan Regency. With the help of colleagues who act as observers, researchers carry out according to plan. The learning scenario is going well. Researchers do according to plan. At the end of the lesson, the researcher evaluates the learning outcomes to determine the level of success. The results of the second cycle of learning improvement are presented in tables 4, 5 and 6 as follows.

Table 4. Teacher activity observation sheet cycle II

No	Observed teacher activity	A(3)	B(2)	C(3)
	Initial activity			
1	The teacher attends and conditions students	√		
2	The teacher opens the lesson	√		
3	The teacher asks questions about the function of Pancasila as the glue of national unity		√	
4	The teacher gives an initial determination of the function of Pancasila as the glue of national unity	√		
5	The teacher gives examples of answering questions about the function of Pancasila as the glue of national unity for students.		√	
	Core activities			
1	The teacher provides learning materials	√		
2	The teacher motivates students to ask questions	√		
3	Interaction provided by teachers and students		√	
4	The teacher explains about the *discovery method of* creating interesting learning for students		√	
5	Giving tests for students	√		
6	The teacher asks students to correct the results of the work that has been written		√	
	Closing Activities			
1	The teacher helps students to reflect after the lesson ends	√		
2	The teacher closes the lesson	√		

Information

A = Good, Score 3
B = Enough, Score 2
C = Less, Score 1

$$\text{Score} = \frac{\text{Total score obtained}}{\text{Total score}} \text{ x } 100\%$$

= 37 / 42 x 100%

= 88.1%

Table 5. Student activity data cycle I

No	Student Activities	Total students	Percentage
1	How are the student activities during the lesson?	7	100%
2	Student notes on important things during KBM	7	100%
3	Students ask questions	7	100%
4	How do students respond when learning with the *discovery learning method?*	7	100%
5	How do students respond when the teacher explains the material	7	100%
6	During the teaching and learning process, it looks like discussing or asking the teacher or students	7	100%
7	Motivation of students with the *discovery learning method* as a learning resource on the material of the function of Pancasila as the glue of national unity	7	100%
8	During KBM, students pay attention to the teacher's explanation	7	100%
9	Student discussion during KBM	7	100%
10	Positive response to the use of *discovery learning methods* in learning	7	100%
	Average	7	100%

The results of the second cycle of research showed that student activity was 100% so that it had reached the achievement indicator. Some students in cycle I was less active and only relied on smarter students, in cycle II were actively involved in learning. Students with average abilities are more able to take advantage of this learning because they can complement each other and discuss with their group friends.

Table 6. Distribution of test scores in cycle II

No. massage	Score	Information	
		T	ST
1	80	√	
2	90	√	
3	80	√	
4	80	√	
5	90	√	
6	90	√	
7	80	√	
Amount	590		
Total Score 590			
Total Ideal Maximum Score 700			
Average Score Reached 85			

Description:
T = Completed
TT = Not Complete
Number of students who completed = 7
Number of students who have not completed = 0
Classic = Complete

From the table above, it is obtained that the average value of student learning achievement is 85 and the achievement of the KKM is 80 and this has reached an average above the KKM that has been determined by all students who have finished studying. These results indicate that in the second cycle, mastery learning has increased from the cycle I. The increase in student learning outcomes is because after the teacher informs that at the end of each lesson there will always be a test so that at the next meeting students are more motivated to learn. In addition, students have also begun to understand what is meant and what the teacher wants by applying the discovery method.

Planning

Develop lesson plans, determine teaching aids, determine learning methods, plan the focus of learning improvement, compile observation sheets, compile evaluation sheets

Implementation

The implementation of the second cycle of learning was carried out on Thursday, September 13 2018, at Balongwangi III Elementary School, Tikung District, Lamongan Regency. In this case, the researcher acted as a teacher. The process of learning activities refers to the revised learning plan in the first cycle so that mistakes, shortcomings and obstacles in the first cycle do not occur again in this second cycle.

Observation

The results of observations from observers during the learning process in cycle II are students when receiving lessons pay attention to the explanations given by the teacher well. Participate in learning activities, there is a desire to find solutions to questions from the teacher, want to ask if there are difficulties, and start to dare to work in front of the teacher. although it is not possible, the observations obtained by the observer to the teaching, teacher are that the teacher has prepared a lesson plan well, the method used is appropriate, the motivation is sufficient, but there are still some shortcomings not asking students about the difficulties obtained from the material being taught

Reflection

After the researchers made several improvements, namely pre-cycle improvement, cycle I and cycle II, the researcher realized that in the Civics learning process the material for the function of Pancasila as the glue of national unity in cycle II was so maximal that at the end of cycle II, the teacher gave interviews and test items to find out students ' understanding of the energy material and its changes and increasing student achievement after the discovery learning method was applied.

According to Nawawi (1981 127), based on the objectives, learning outcomes is divided into three types, namely: 1) learning outcomes in the form of skills or abilities in doing or doing a task, including skills in using tools, 2) learning outcomes in the form of the ability to master knowledge about what is being done, 3) learning outcomes in the form of changes in attitudes and behavior.

Discussion

At the stage of the learning plan cycle I, the intervention used was the Discovery learning method by utilizing civics teaching aids. In cycle 1 the class atmosphere was not conducive because only a few students answered and asked questions during the teaching and learning process, not many students gave correct answers, even during student group discussions. The smart one who dominates the group discussion The answers given by the students are spontaneous or random, without first thinking whether the answers given are correct or correct. At the end of the first cycle, the problem is that there is no social interaction between students in the class. There are students who do not answer questions at all, there are only one time expressing opinions, but there are also students who tend to master the conversation. According to Vygotsky "social interaction with other friends triggers the formation of new ideas and enriches students' intellectual development" The final test of the cycle I am 10 items questions in which the whole question is in the form of short answers (Darwin, 2011; Roth & Lee, 2007). The final test item of this cycle aims to determine the importance of students' understanding of fractions. The results of the final test item in the first cycle indicate the development of student achievement and student motivation. This is based on the test results which show that the average student learning outcomes are 69 of the total 7 students, 3 students have a score of <70 and 4 students have a score of 70.

In the second cycle, the intervention carried out was the discovery learning method to identify the function of Pancasila as the glue of national unity. The students' skills in the second cycle showed a

better improvement. This is based on the test results which show that the average student learning outcomes are 85 out of 7 students, all students have a score of 70. In the first cycle as many as 57% achieved completeness while in the second cycle as much as 100%, this can indicate a significant increase, it is due to the use of learning methods or models and appropriate learning methods so that students can learn with high activity, supported by enthusiasm so that it gets the expected performance.

Conclusion

The use of discovery learning methods involves students in terms of discovering knowledge, this activity certainly increases their problem solving skills directly by experiencing it. Involving students through direct discovery experiences can increase their motivation because they feel happy and get pleasant experiences as well. The final results obtained with various experiences during learning activities are evidently the discovery learning method is able to improve Civics learning abilities. By using the discovery method, Civics learning outcomes increased from the average in cycle 1 to only 69, in cycle 2 to 85.

Abdullah, D. 2008. Pendekatan STM dalam Meningkatkan Pembelajaran IPS (PTK pada Pembelajaran IPS di Kelas IV SDN Keramat 3 Kota Cirebon). Tesis SPs UPI. Bandung

Afni,N. Kharitil & Abdullah. 2014. Penerapan Pendekatan STM (Sains Teknologi Masyarakat) pada Konsep Pencemaran Lingkungan untuk mengkaitkan Hasil Belajar dan Kemampuan Berfikir Kritis di SMAN 4 Wira Bangsa Meaulaboh. jurnal biotik. 2(2).

Afriawan, M. Ahmad. B. Lathifah. 2012. Pengaruh Penerapan Pendekatan SAVI Bervisi SETS Pada Pencapaian Kompetensi Terkait Reaksi Redoks. Unnes Science Education Journal, 1 (2): 51-59.

Arikunto, S. 2009. Penelitian Tindakan Kelas. Jakarta: Bumi Aksara.

Arikunto, Suharsimi. 2001. Dasar-dasar Evaluasi Ilmu Pengetahuan. Jakarta: Bina Aksara.

Arikunto, Suharsimi. 2010. Prosedur Penelitian Suatu Pendekatan Praktik. Jakarta: Rineka Cipta.

Arniyana, I. 2004. Pengembangan Peta Pikiran untuk Peningkatan Kecakapan Berpikir Kreatif Siswa. Jurnal Pendidikan dan Pengajaran UNDIKSHA no.3 Juli 2007

Bernadete, I.D.R. 2009. Science, Technology, Society and Environment (STSE) Approach in Environmental Science for Nonscience Students in a Local Culture. Journal of Higher Education Research Science and Technology Section. 6 (281)

Darwin, S. (2011). Learning in activity: Exploring the methodological potential of action research in activity theorising of social practice. *Educational Action Research*, *19*(2), 215–229. https://doi.org/10.1080/09650792.2011.569230

Departemen Pendidikan Nasional. 2005. Materi Pelatihan Terintegrasi Pendidikan Kewarganegaraan, Buku 2. Jakarta: Direktorat Pendidikan Lanjutan Pertama

E. Yeger, Robert. 2000. Assesment Result With The Science/Technology/Society Approach.

Hapsari, T. S. 2011. Penerapan Model Pembelajaran Konstruktivisme untuk Meningkatkan Hasil Belajar IPA. Jurnal Pendidikan Penabur. 1(16):34-45.

Heath, Phillip; Marker, Gerald et al. 1990. Teaching about Science, Technology and Society in Social Studies: Education for Citizenship in the 21st Century. Social Education April/May:189-193.

Heath, Phillip; Marker, Gerald et al. 1990. Teaching about Science, Technology and Society in Social Studies: Education for Citizenship in the 21st Century. Social Education April/May:189-193.

Heath, Phillip; Marker, Gerald et al. 1990. Teaching about Science, Technology and Society in Social Studies: Education for Citizenship in the 21st Century. Social Education April/May:189-193.

Hisyam Zaini, Bermawy Munthe, Sekar Ayu Aryam. 2004. Strategi Pembelajaran Aktif, Yogyakarta: CTSD.

Holiah, I. 2003. Pendekatan STM dalam pembelajaran Sejarah di Kelas III SMU Darul Falah, Cililin, Kabupaten Bandung. Tesis SPs UPI. Bandung: Tidak Diterbitkan.

Idris, I. 2009. Kostribusi Penerapan Model Pembelajaran Sains Teknologi Masyarakat terhadap Pemahanman Konsep dan Sikap Kepedulian Siswa pada Mata Pelajaran IPS di Sekolah Dasar. Tesis UPI Bandung: tidak diterbitkan.

Indrawati. 1999. Keterampilan Proses Sains: Tinjauan Kritis dari Teori ke Praktis. Bandung: Dirjen Pendidikan Dasar dan Menengah.

Indrawati. 1999. Keterampilan Proses Sains: Tinjauan Kritis dari Teori ke Praktis. Bandung: Dirjen Pendidikan Dasar dan Menengah.

Jariah, S., Khoiri, N., dan Aryanto, D. 2012. Pengaruh Pembelajaran Bervisi Sets (Science, Environment,Technology And Society) Dengan Media Permainan Ular Tangga Terhadap Hasil Belajar Siswa Kabupaten Batang . jurnal ikip pgri semarang

Jariah, S., Khoiri, N., dan Aryanto, D. 2012. Pengaruh Pembelajaran Bervisi Sets (Science, Environment,Technology And Society) Dengan Media Permainan Ular Tangga Terhadap Hasil Belajar Siswa Kabupaten Batang . jurnal ikip pgri semarang

Ketetapan MPR RI No. IV/MPR/1999, Tentang GBHN. Surabaya: Penabur Ilmu Miarsa,

Malik, A. 2014. Keefek tifan Pendekatan CTL Terhadap Aktivitas dan Hasil Belajar IPA Materi Magnet Kelas V SDN Tegalsai 1 Kota Tegal. Skripsi: FIP Universitas Negeri Semarang.

Malik, A. 2014. Keefek tifan Pendekatan CTL Terhadap Aktivitas dan Hasil Belajar IPA Materi Magnet Kelas V SDN Tegalsai 1 Kota Tegal. Skripsi: FIP Universitas Negeri Semarang.

Mulyasa, E. 2005. Menjadi Guru Profesional, Menciptakan Pembelajaran Kreatif dan Menyenangkan. Bandung: PT Remaja Rosdakarya Offset.

Nazir, Mol. 1988. Metode Penelitian. Jakarta: Ghalia Indonesia.

Novrizal, F. 2010. Pengaruh Model Pembelajaran Sains Teknologi Masyarakat Terhadap Peningkatan Penguasaan Konsep Fisika Pada Konsep Usaha dan Energi. Skripsi: FMIPA UIN Syarif Hidayatullah Jakarta.

Novrizal, F. 2010. Pengaruh Model Pembelajaran Sains Teknologi Masyarakat Terhadap Peningkatan Penguasaan Konsep Fisika Pada Konsep Usaha dan Energi. Skripsi: FMIPA UIN Syarif Hidayatullah Jakarta.

Ormar Hamalik. 1992. Psikologi Belajar dan Mengajar. Bandung: Sinar Baru

Poedjiadi, Anna. 2005. Sains Teknologi Masyarakat: Model Pembelajaran Konstektual Bermuatan Nilai. Bandung: PT Remaja Rosda Karya Bekerjasama Dengan Program Pasca Sarjana UPI.

Poedjiadi, Anna. 2005. Sains Teknologi Masyarakat: Model Pembelajaran Konstektual Bermuatan Nilai. Bandung: PT Remaja Rosda Karya Bekerjasama Dengan Program Pasca Sarjana UPI.

References

Roth, W. M., & Lee, Y. J. (2007). “Vygotsky’s neglected Legacy”: Cultural-historical activity theory. *Review of Educational Research*, *77*(2), 186–232. https://doi.org/10.3102/0034654306298273

Saiful Rachman, Yoto, Syarif Suhartadi, Suparti. 2006. Penelitian Tindakan Kelas dan Penulisan Karya Ilmiah. Surabaya: SIC Bekerjasama Dengan Dinas P dan K Provinsi Jawa Timur.

Slameto. 1991. Proses Belajar Mengajar Dalam Sistem Kredit Semester (SKS). Jakarta: Bumi Aksara

Soetomo. (1993). Dasar-Dasar Interaksi Belajar Mengajar. Surabaya: Usaha Nasional.

Sudjana. Nana. 2006. Penilaian Hasil Proses Belajar Mengajar. Bandung: PT. Remaja Rosdakarya Offset

Sudjana. Nana. 2006. Penilaian Hasil Proses Belajar Mengajar. Bandung: PT. Remaja Rosdakarya Offset.

Suhud, SA 2022. Pengaruh model pembelajaran berbasis masalah dalam menulis teks eksplanasi. Journal of Diversity in Learning (JDIL) , 2 (1), 185 - 193. Diperoleh dari https://journalofdiversity.com/index.php/jdil/article/view/52

Suryanto Hadi, Degeng I Nyoman Sudana, Djatmika Ery Tri, Kuswandi Dedi**,** 2020, The Effect of Creative Problem Solving Learning Strategy on Conceptual and Procedural Understanding Moderated by Social Skills, International Journal of Innovation, Creativity and Change.

Yusufhadi. 1995. Peningkatan Mutu Pendidikan, Jurnal Teknologi Pembelajaran. Malang: IPTPI