

**IMPROVING STUDENTS' LEARNING OUTCOMES ON LIVING THINGS
CONCEPT THROUGH ENVIRONMENTAL APPROACH IN 4th GRADE OF SDN
BANJAR 3**

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<p>Article Info</p> <hr/> <p>History: Submitted June 2th, 2021</p> <p>Revised June 2th, 2021</p> <p>Accepted September 12th, 2021</p>	<p>Abstract</p> <p>This research is based on the field's observations towards the low science score in 4th grade of SDN Banjar 3. This shows that the teaching and learning activities, especially in science learning, are still not as expected. To handle this, the researchers tried to apply one of the learning strategies that are considered appropriate and in accordance with the learning material, by using the Environmental Approach. The subjects of this research were the 28 students of 4th grade in SDN Banjar 3, consisting of 14 boys' students and 14 girls' students. The results of this research are: 1) Students' activities in science learning on the living things concept have increased from the first cycle of 52.14%, the second cycle is 63.58%, and the third cycle reached 81.42%. 2) Students' understanding of the living things concept obtains a very good result compared to the results obtained in pre-cycle activities with an average score of 45.35. After the implementation of the first cycle, the average score obtained was 55.36, in the second cycle, the score increased with an average score of 70.35, and the average score in the third cycle obtained very good results of 72.15. This means that students' understanding of the concept of living things and their environment is increased very well.</p> <p>Keywords: Learning Outcomes; Living Things; Environmental Approach</p>
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A. Introduction

Learning is an everyday event and action, from students as people who learn and from teachers as the instructor. The relationship between teachers and students is a functional relationship, in the sense that the behavior of educators and educated is the goal to be achieved by both teachers and students, especially in teaching and learning activities. During the learning process at school, students must be faced directly with the real problems, especially in science learning which is always related to the surrounding natural environment. Natural Sciences is concerned with how to find out about the natural surroundings systematically, not just a collection of knowledge in the form of facts, concepts, or principles, but a process of observing the object of study (Tawar: 2016).

In general, the teaching and learning process by applying the environmental approach is one of the efforts to develop the school curriculum that has been existed. Existing facilities in the surrounding environment as the learning resources are part of the learning process. Education using an environmental approach is basically an approach used to help students to make the teaching and learning process better, in accordance with the expected behavioral changes.

One of the goals is to complete the lesson content contained in the school curriculum by the direct observation and experience by students outside the class, thus the learning will be more meaningful and valuable because students are faced with actual events and circumstances.

The researchers observed the science lessons at SDN Banjar 3 so far have not been implemented properly and optimally according to the demands of the existing curriculum. This can be seen from the number of students who experience understanding difficulties on the concepts of science taught by their teachers, this happens because it is closely related to the problem of the learning process itself. Usually, the teacher conveys the concept of science by not following the concept of science but with the teachers' own way of thinking and language, without measuring the ability, understanding, reasoning, and thinking level of students, even though the learning science is very closely related to the natural environment. To maintain the existence of the environment to be very well maintained and the environment becomes friends, we must also be good friends to our environment (Munisah dkk. : 2018).

That is why in science learning, a teacher must be able to use the natural

environment as the students' learning tool and the teacher should also be able to understand that students' thinking levels cannot be equated with the thinking levels of other students, so during the teaching and learning process, the children do not experience difficulties in understanding the scientific concepts. Natural Science is a piece of scientific knowledge that has been tested for the truth through the scientific method, with the characteristics of objective, methodical, systematic, universal, and tentative (Tuwuh W: 2015).

To achieve the above objectives, the researchers are interested to conduct research on one of the classes, 4th grade at SDN Banjar 3, which obtained data and facts about the decline in science scores in the first-semester test results for the academic year of 2020/2021 with an average score of the class below 5.60.

This happens because, on the teaching and learning process about science learning, students do not get direct experience of the ongoing material, the teacher only uses the lecture method and assigns the assignments during the teaching and learning process, so the children feel difficulties to understanding the material, especially when the teaching and learning activities about the concept of living things and their environment which very closely related to the natural

environment. As stated by Alpina and Halidjah (2016) that the goal of natural sciences learning at the elementary school level is to develop knowledge and concepts of natural science that are useful and can be applied in everyday life. This illustrates that science learning needs to be conducted through the environmental approach because by using the environmental approach, the students are faced directly with real problems. As the opinion of Widi and Laksmi (2020) that one solution to increase the effectiveness of learning that involves students actively is to apply the learning outside the classroom with the concept of playing while learning.

Science education focuses on providing a direct experience as an effort to develop students' competencies, so they know and understand the natural environment in a scientific form. In order for successful science learning, a teacher should make a program or lesson plan.

Barlia, L (2009: 13) express that, in general, the purpose of the science learning process in elementary schools can be concluded that:

“By providing science education in elementary schools, it is expected that students can be demonstrating an increased understanding of science, or more specifically, it is expected that it can make

the new generation of Indonesian who are literate in science and technology. Therefore, with the science learning program in elementary schools, it is expected that the nation's children can: 1) Solving the problems easily, effectively, and efficiently 2) Using the skills systematically and easily in the existing the problem-solving process 3) Develop a positive scientific attitude, and 4) Increase the understanding of the science principles”.

Secara alamiah, pada anak usia sekolah dasar lebih cenderung untuk ingin mencari jawaban dari semua pertanyaan-pertanyaan yang mereka punyai. These simple questions are more implication of their natural character in order to fulfill their curiosity about all the phenomena they find in their daily lives. Based on that, the science learning process for children must be adapted to the natural character of their age. To achieve these goals, teachers must choose and use effective and appropriate methods or approaches in conveying the science learning materials in elementary schools. The characteristics of children's motivation to learn science has a very large role in the students' successes in learning.

Teaching and learning activities are conditions that are deliberately created. It is the teacher who creates it to teach students. This is in line with the opinion of Wahyu and

Hilga (2018) that the teachers' duty in learning is to make the students learn through the creation of interesting and meaningful learning strategies and environments. The existence of interaction between teachers and students makes educational interaction relationships occur by utilizing various sources as the medium. There, all the teaching components are played optimally in order to achieve the teaching objectives that have been set before conducting the teaching (Syaiful dan Aswan, 2006: 37).

A teacher should already know what to do to create teaching and learning conditions that can lead students to a better learning process. Hendrawati (2013) explained that teachers should be able to stimulate students to build their own understanding with a learning method that uses real-world reality as a context for students to learn about critical thinking and skills of discovering or developing their own knowledge and concepts. The teacher's duty is to try to create learning activities that can encourage students so it creates a sense of pleasure for all students. An unpleasant learning atmosphere for students will lead to less active teaching and learning activities so the teaching and learning process cannot run well. Motivation sourced from the inside (intrinsic motivation) and outside (extrinsic

motivation), how strong students' motivation in learning will determine the quality and learning outcomes, therefore teachers are required to be able to encourage and increase students' motivation in learning (Suprihatin in Gunawan et al, 2015). As well as the opinion of Fransiska FKS (2018), that learning outcomes are the abilities that students have after receiving a learning experience, and are the abilities that students gain after experiencing the learning process.

Therefore, the learning methods or learning approaches are needed to help the teaching and learning process, because using the learning method is expected to support the teaching and learning activities so it can be used as an effective tool to achieve the learning objectives. As quoted from Zulkifli (2015) the approach can be interpreted as a conceptual framework used as a guide in carrying out an activity.

In the teaching and learning process implementation, especially in science subjects, teachers should use an approach that is currently being promoted, one of which is by using the environmental approach method that is very appropriate to be used during the science learning process, by using the natural environment as the learning tool. As stated by Inti Sukawati (2020) the purpose of using the approach is to lead the perspective/perception and or the

process of reviewing the subject material with terminology, so an understanding and formation of the expected students' behavior will be obtained. The environmental approach is a learning method which the learning process uses and relates the natural environment as learning material, especially in science subjects that are related to the natural environment. As well as the opinion of Talakua and Tehupuring (2016) explained that the environmental approach also gave students the opportunity to collect data from observations, sketching, photoshoots, interviews, and measurements. Science education in elementary schools is expected to be a vehicle for students to learn about themselves and the environment, as well as the prospects for further development in its application in everyday life (Pindo and Rinci, 2018).

Basically, the natural environment approach is an approach used to help students make the teaching and learning process work better in accordance with the expected learning objectives. Hendracipta, et al (2017), students are required to be able to participate in absorbing, selecting, and processing information to develop talents and interests. The surrounding environment approach is a learning approach that tries to improve students' order through the

utilization of the surrounding environment as the learning resource (Dhea Adela: 2019).

The need for learning activities by applying the natural environment approach is intended so the learning process with this approach can complement teachers to bring students to understanding the real meaning of abstract concepts. In understanding the students, the teacher will know how to manage the learning for students or in other words teach students (Heroninus: 2016).

A hypothesis is a form of a temporary answer to a problem (in the form of

research), the answer is only theoretical and considered correct even though it has not been proven wrong or right based on the empirical data obtained when carrying out classroom action research. The action hypothesis is an assumption obtained when carrying out research. Based on the description above, the hypothesis of this research is “If using the environmental approach in science learning on the concept of living things, the learning outcomes will increase”.

B. Research Methodology

This research was conducted at SDN Banjar 3. The reason for choosing this location is because it is close to the researcher's residence. Moreover, the researchers found that there were problems with 4th grade students who did not understand and master the concept of living things. The research subjects are the learning activities in the classroom, with the Environmental Approach to the concept of living things and their environment in 4th-grade of 28 students, consisting of 14 boys' students and 14 girls' students.

The research will be conducted by the author by applying the classroom action research method, which this research is conducted by involving teachers as educators

and their students. Where the action aims to further improve the students' learning outcomes, in other words, this classroom action research should be an improvement in the teacher's efforts of the learning process. The initial action of this research is to research and describe the research objectives, then proceed by applying actions to the research objectives.

Arikunto (2010:2) said that “seeing that there are three words that form this definition, so there are three meanings that can be explained”.

Classroom action research is research conducted by the teacher, collaborating with researchers (or conducted by the teacher himself who also acts as a researcher) in the

classroom or at the school where he teaches by emphasizing the improvement or increase the process and practical learning (Suhardjono, 2010:57).

Classroom action research (CAR) is an approach to improve education by making changes towards educational and learning outcomes.

In essence, the implementation of research is always an attempt to solve a problem. Classroom action research has problem-solving characteristics that must be solved, namely problems that are taken to be solved through CAR. The research activities depart from the problem of the teaching and learning process that is conducted daily by the teacher. Classroom action research has the characteristics of certain actions taken to improve the teaching and learning process in the classroom. Basically, CAR aims to improve and solve various real and practical problems in an effort to improve the quality of learning in the classroom.

The main purpose of classroom action research (CAR) is to improve teachers in learning process activities. These goals can be achieved by conducting various alternative actions in solving various problems of learning activities in the classroom.

The CAR model that researchers will implement in this research is the CAR model from Kemmis and Mc. Taggart. Arikunto (2010: 16) argues that the CAR model of Kemmis and Mc. Taggart essentially consists of several devices or strands with one device consisting of four components, namely Planning, Action, Observation, and Reflection.

Data collection in this research uses the assessment instrument. The instrument used in this research is applying observations and giving tests to students at the end of learning. Observation is an activity of observing the results or impact of the actions taken on students. In this research, observations will be used to observe students' learning activities when participating in learning by applying the environmental approach to the concept of living things and their environment.

Tests are the questions or exercises and other tools that are conducted to review the extent of material acquisition in terms of skills, knowledge, intelligence, and abilities possessed individually or in groups. This test is used to obtain data on the students' learning outcomes of the concept of living things and their environment in the form of a 10 questions multiple-choice test.

C. Result and Discussion

Before conducting the learning process, the teacher firstly prepares students for learning so they will focus on receiving the learning. This is in line with Drever's opinion (in Sigit Setiawan and Andi Suhandi; 2020) states that readiness is a willingness to respond or react. Based on the understanding of readiness expressed by Drever, it can be said that students who are ready to learn are students who respond or react to learning activities.

The results of classroom action research activities conducted in 4th-grade students of SDN Banjar 3 from the first cycle, second cycle, and third cycle, obtained data in the form of observations from 4th-grade teachers, results of documentation studies on lesson plans, and observations of the science learning process.

In teaching and learning activities in the Pre-Cycle, it appears that teachers still dominate the learning activities or use the lecture method and have not implemented learning using the environmental approach, this is based on the results of researchers' observations of science learning activities on the concept of living things and their environment. The value obtained in the post-test of the pre-cycle is very low, the average score achieved is 40.35, and this indicates that there is difficulty in understanding the

science learning material on the concept of living things and their environment.

In the first cycle activities, students' activity during science learning on the material of relationships between living things using the environmental approach is very low. This can be seen from the students' activity in presenting the student observations result in the environment with very low results of 14%. This happens because there is no courage from students to present their observations. Next, the average score of students' activity obtained is 52.14%, and the post-test score of the first cycle which the average score is very low is only 55.36. This shows that there is no improvement in understanding the science learning materials about the concept of living things and their environment.

On the second cycle activities, the students' activities during science learning on the food chain materials using the environmental approach are good and starting to have progress. This can be seen from the students' activity in presenting the results of observations in the environment with the good results of 28% and the average score of students' activity obtained is 63.58 % and the average score achieved of second cycle post-test is 70.35. This shows an improvement in understanding the science

learning materials about the concept of living things and their environment and students have begun to venture to convey their observations.

In the third cycle activities, students' activities during science learning on the material of the relationship between living things and their environment with the environmental approach are very good. This can be seen from the results of students' ability when observing the surrounding environment as the source of learning with

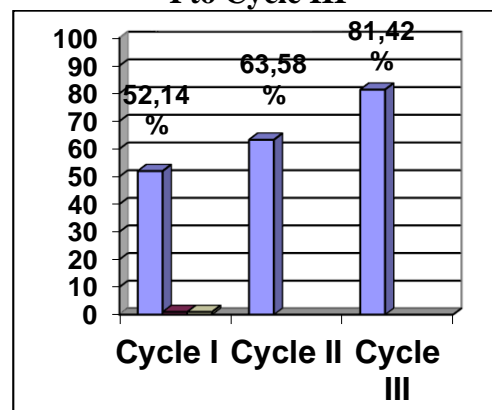
the results of 89% and the average score of students' activity during learning in the surrounding environment is 81.42%, and the average post-test score of the third cycle achieve 72.15. Students are very enthusiastic in understanding the science learning material and this proves that there is an improvement in understanding the science learning material about the concept of living things and their environment and shows that the classroom action research conducted is successful.

Table 1. Recapitulation of Students' Activity Observation Results from Cycle I to Cycle III

No	Observed Aspects	Percentage		
		Cycle I	Cycle II	Cycle III
1	Students' readiness in conducting the learning	93	100	100
2	The student's ability in understanding the learning material	46	57	86
3	The student's ability to observe the natural environment around the learning resources	79	89	89
4	Asking questions about the concept of living things and their environment	28	43	61
5	Students' activeness in presenting the observation results that in accordance with the conditions in the environment	14	28	71
Total		260,71	317,86	407,14
Average		52,14	63,58	81,42

Based on the table above, it can be seen that students' learning activities from each cycle have increased. This can be seen from the improvement in activity based on the aspects observed by the author. The following is a diagram of students' learning activities obtained from the results of the recapitulation:

Picture 1. Recapitulation of Students' Activity Observation Results from Cycle I to Cycle III



From the graph above, it can be seen that there is an increase from the first cycle to the third cycle of students' activities in science learning on the concept of living things and their environment.

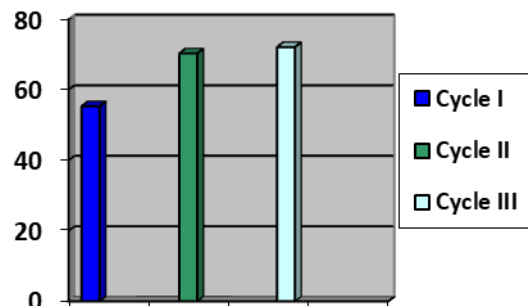
Table 2. The Data Results of the Post-test Score of Students' Learning Outcomes Recapitulation from cycle I, II, and III

No	Students' Name	Score		
		Cycle I	Cycle II	Cycle III
1	Abdul Rohman	30	60	60
3	Muhamad Aldi	70	90	90
4	Lia Apriliani	40	50	60
5	Najiyullah	70	70	70
6	Mujiyani	60	80	80
7	Ana Mustika	30	40	60
8	Dede Ramli	60	50	80
9	Nahrul Hayat	40	60	60
10	Suryanti	90	80	80
11	Ridjki Fitramadhani	50	70	70
12	Ajib Mahfudin	70	90	90
13	Santi Haryanti	50	70	70
14	Dewi Mulyasari	40	60	60
15	Wiwin Windari	30	70	70
16	Rian Agustian	80	80	80
17	Ria Oktofia	40	70	70
18	Farid Alamsyah	20	30	40
19	Sunariyah	90	90	90
20	Hamidah	60	80	80
21	Yuliana Dewi	60	60	60
22	Lilis Khoirun Nikhlah	60	70	80
23	Sutedi	20	50	50
24	Nurul Fitria Dewi	70	70	70
25	Rosmayanti	70	90	90
26	Puput Muhayanah	30	80	80
27	Muhamad Dicki	60	30	70
28	Muhamad Haerani	70	90	90

Total	1540	1970	2020
Average	55,36	70,35	72,15

From the recapitulation table of students' learning outcomes, the data shows that students' learning outcomes of science learning have increased from the first cycle that only reached the average score of 55.36 to 72.15 in the third cycle. This shows the effectiveness of learning activities by applying the environmental approach is very helpful for students to understand the teaching material delivered. The following is a recapitulation graph of students' learning outcomes.

Picture 2. The Data of Recapitulation Results of the Post-Test Scores of Students' Learning Outcomes from cycle I, II, and III



The graph above shows the indication of improvement in students' learning outcomes which means that there is an increase in students' achievement in the first cycle to the second cycle and to the third cycle.

The results of this research are in accordance with the research results of Wiguna, Angga (2015) which states that

the increase in the average score of the class at the Pre-Cycle 41.29, the First Cycle 50.64, the Second Cycle 62.90, and the Third Cycle 71.93, these results indicate that to students in learning will increase the overall score of students.

applying PLAS can increase the average score of students in 5th grade and proves that applying an appropriate approach

D. Conclusion

Based on the results of observations, documentation, and tests that the author did with the teacher, there are changes that are perceived by teachers and students when the process of teaching and learning activities uses the environmental approach. These changes are from students' activities in science learning on the concept of living things have improved very well. This can be seen from the observation results of students' activities conducted by the researchers in each cycle, starting from the first cycle of 52.14%, the second cycle that began to increase to 63.58%, and the third cycle reaches 81.42%. It is very clear that in each cycle there have been better changes, the increase in students' learning activities using the environmental approach. It means that the students show their readiness to take part in learning, students' courage to answer and

ask questions, students begin to participate in group discussions to present their observations in front of the class.

After using the surrounding environment as the learning resources, students' understanding of the concept of living things obtain very good results compared to the results obtained in pre-cycle activities with an average score of 45.35. This can be seen from the post-test results of the first cycle to the third cycle. After taking action in the first cycle, the average score obtained was 55.36, in the second cycle there was an increase in the students' score with an average score of 70.35, and in the third cycle, the average score of the students obtain very good results with the average score of 72.15. This means that the student's understanding of the concept of living things and their environment is increased very well.

References

- Alpina dan Halidjah (2016). *Peningkatan Hasil Belajar Siswa Dalam Pembelajaran IPAMenggunakan Metode Demonstrasi Sekolah Dasar*. JPP Khatulistiwa Vol. 5 No. 1 Hlm. 1-12
- Arikonto (2010). *Penelitian Tindakan Kelas*. Jakarta: Bumi Aksara.
- Barlia, L (2009). *Teori Pembelajaran Sains di SD*. Subang: Royan Press
- Dhea Adela (2019). *Pendekatan Lingkungan Sekitar Sebagai Basis Pembelajaran Untuk Mengembangkan Sikap dan Nilai Dalam Pembelajaran IPS*. Jurnal Belaindika Vol. 01 No. 02 Hlm. 62-33
- Fransiska FKS (2018). *Peningkatan Hasil Belajar Siswa SD Pada Pembelajaran Tematik Melalui Penerapan Model Pembelajaran Role Playing*. Jurnal Satya Widya Vol. 34, No. 1. Hlm. 62-76
- Gunawan dkk (2015). *Faktor-Faktor Yang Mempengaruhi Hasil Belajar Siswa*. JPPI Vol. 12 No. 1 Hlm. 14-22
- Hendracipta, dkk (2017). *Perbedaan Hasil Belajar Siswa Antara Yang Menggunakan Srategi Inkuiri Dengan Strategi Ekspositori*. JPSD Untirta Vol. 03 No. 01 Hlm. 33-41
- Hendrawati (2013). *Pengaruh Pemanfaatan Lingkungan Sebagai Sumber Belajar Melalui Metode Inkuiri Terhadap Hasil Belajar Siswa SDN I Sribit Delanggu Pada Pelajaran IPS*. Jurnal Pedagogia Vol. 02 No. 01 Hlm. 59-70
- Heroninus (2016). *Faktor Yang Mempengaruhi Hasil Belajar Siswa Sekolah Dasar Di Kecamatan Kota Tambolaka*. Jurnal Prima Edukasi Vol. 04 No. 02 Hlm. 134-147
- Inti Sukawati (2020). *Meningkatkan Prestasi Belajar Ilmu Pengetahuan Alam Melalui Pendekatan Lingkungan Pada Siswa Sekolah Dasar*. Jurnal Penelitian dan Kajian Pendidikan Islam Vol. 10 No. 1 Hlm. 19-25
- Munisah, dkk (2018). *Pendidikan Lingkungan Melalui Pembelajaran IPS Dengan Pendekatan Project Based Learning Dalam Menciptakan Sekolah Hijau*. Jurnal Pendidikan Dasar Vol. 9 No. 1 Hlm. 64-74
- Pindo dan Rinci (2018). *Meningkatkan Hasil Belajar Siswa Dengan Alat Peraga Pada Mata Pelajaran Ipa Kelas IV SDN Nomor 14 Simbolon Purba*. School Education Journal (SEJ) Vol. 8 No. 2 Hlm. 121-129
- Sigit Setiawan dan Andi Suhandi (2020) *The Usage Of Kit-For-Kids In Discovery Learning Model To Improve The Understanding Of Science Teaching Materials On Elementary School Students*. Jurnal JPSD Untirta Vol. 6 No. 1 Hlm. 43-54
- Suhardjono (2010). *Penelitian Tindakan Kelas*. Jakarta: PT. Bumi Aksara
- Syaiful dan Aswan (2006). *Strategi Belajar Mengajar*. Jakarta: Rineka Cipta
- Talakua dan Tehupuring (2016). *Peningkatan Hasil Belajar Ipa Konsep MakhluK Hidup Dan Lingkungannya Melalui Pendekatan Lingkungan Pada Siswa SD Kelas IV*. JPSD Untirta Vol. 02 No. 02 Hlm. 138-146
- Tawar (2016). *Peningkatan Prestasi Belajar IPA Melalui Pendekatan Lingkungan Alam Sekitar Pada Siswatunagrahita Kelas 7*. Jurnal Rehabilitasi dan Remediasi Vol. 25 No. 01 Hlm. 19-24.
- Tuwuh Waluya (2015). *Peningkatan Aktivitas dan Hasil Belajar IPA Materi Pewarisan Sifat Dengan Media Kartu Dogen*. JPK UNNES Vol. 1 No. 1 Hlm. 18-28
- Wahyu dan Hilga (2018). *Meningkatkan Hasil Belajar Peserta Didik Kelas 3 SD Menggunakan Model Picture And Picture Dan Media Gambar Seri*. JPSD Untirta Vol. 4 No. 2 Hlm. 228-242.
- Widi dan Laksmi (2020) *Penerapan Pendekatan Lingkungan Alam Sekitar*

- (PLAS) untuk Meningkatkan Motivasi Belajar dan Hasil Belajar Siswa Kelas V Sekolah Dasar. Jurnal Studi Guru dan Pembelajaran, Vol. 3, No. 1, Hlm. 58-66*
- Wiguna, Angga (2015). *Penerapan Pendekatan Lingkungan Alam Sekitar Untuk Meningkatkan Hasil Belajar Siswa Pada Konsep Pencemaran Air: PTK di Kelas V SDN Pangradin 02 Kec. Jasinga Kab. Bogor. Skripsi PGSD UPI Serang. Tidak di Terbitkan.*
- Zulkifli (2015). *Penggunaan Pendekatan Lingkungan Untuk Meningkatkan Hasil Belajar Siswa Dalam Pembelajaran IPS. Jurnal Pelangi Vol. 8 No. 1 Hlm. 117-126*