IMPROVING STUDENTS' LEARNING ACHIEVEMENTS ON SOCIAL SCIENCE AT THE LESSON OF NATURAL RESOURCES AND ECONOMIC ACTIVITY BY USING GUIDED DISCOVERY LEARNING AT FOURTH GRADE STUDENTS ON THE FIRST SEMESTER AT ELEMENTARY SCHOOL

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ABSTRACT

This study was conducted to discover improvement on students' learning achievement on social science by using guided learning discovery. It was conveyed as Classroom Action Research (CAR). The subject upon this study encompassed 24 of 4th grade students of SDN 1 Bayeun (elementary school), sub district of Rantau Selamat, in the regency of East Aceh. Data collection was done by using observation, document recording, and test. Meanwhile, the data analysis was conducted by using descriptive analysis. Through the test, the result on students' achievement upon the lesson of Natural Resources and Economic Activity was gathered. Before treatment, the average score was 64, 96 with the passing percentage was 54, 17%. After the first cycle of treatment using guided discovery learning, the average score and passing percentage was increased to 74, 38 and 79, 17% respectively. The final result on second cycle, in which revision and improvement had been done one several leaning aspects, the result of score and passing percentage had been increased to 82, 71 and 100% respectively. The result indicated that the learning method of guided discovery learning could improve students' achievement on social science, particularly on the lesson of Natural Resources and Economic Activity at 4th grade students on the 1st semester during academic year of 2016/2017.

Keywords: *Learning Achievement, Social Science. Natural Resources and Economic Activity, Guided Discovery Learning Method*

Introduction

a. Background of Study

The subject of Social Science is taught on elementary level. It studies about the dynamic on several occasions, facts, concepts, and generalization of several social issues within society. On the elementary level, this subject encompasses the lesson of geography, history and sociology. It is expected that by learning this subject, students will be a responsible and democratic Indonesian citizen, also preserving peace as the part of global community (Sapriya, 2009:2).

The success on learning could be measured through learning achievement in the classroom. Aqib (2011:12) mentioned that the learning achievement was indicators of knowledge of what had been mastered by the students during learning process. It meant that as higher the comprehension and mastery on Social Science, the higher students' achievement would be, which referred that the students had met the learning objectives.

The lack of interest upon the Social Science is caused by the monotonous learning activities used by teachers during learning process. Most of the teacher only lectured and gave tasks and assignments during learning. It is obvious that such factual condition will cause the students becoming more lazy and uninterested during learning, particularly for Social Science. As the result, the learning condition will not as conducive as it has to be.

Such case and condition also occurred upon 4th grade students of SD Negeri 1 Bayeun at sub district of Rantau Selamat, in the regency of East Aceh. There was the fact that the achievement on Social Science was still insufficient. The minimum passing score for this subject was 70, then from the initial data, only

13 (54,17%) students got score 63,96 in average. There was a tendency that this case was occurred due to conventional learning method, which was still used upon the learning process.

Regarding the fact, it was necessary to develop learning process by using new and effective learning method. It was aimed to improve students' achievements, then; students would also gained better comprehension as stated on learning objectives.

Preventing such situation, teacher actually had to innovate in building good learning atmosphere, which could efficiently and effectively support learning process for reaching optimum learning objectives. Hamzah (2013:23) stated that he conducive learning environment and interesting learning activities were two influencing factors for improving students' motivation during learning. Building good learning environment could be done by implementing various learning method.

Based on aforementioned explanation, the researcher applied the Guided Discovery Learning method on Social Science, particularly at the lesson of Natural Resources and Economic Activity. It was applied in the form of Classroom Action Research entitled *Improving Students' Learning Achievements on Social Science at The Lesson of Natural Resources and Economic Activity by Using Guided Discovery Learning at Fourth Grade Students on the First Semester at SD Negeri 1 Bayeun on the Academic Year of 2016/2017*.

The method of Guided Discovery learning was chosen on several considerations. There were orientating on learning objectives, the individual difference of students, teacher's capacity, lesson characteristics, classroom situation, available facilities, and advantages and lose of this method (Djamarah, 2000:191-193)

b. Research Problems

Regarding the background of study, the problem statement was that "Can the Guided Learning Method improve students' learning achievements on social science at the lesson of natural resources and economic activity at fourth grade students on the first semester at SD Negeri 1 Bayeun on the academic year of 2016/2017?".

c. Research Purpose

The purpose of this study was to discover the improvements on students' learning achievements on social science at the lesson of natural resources and economic activity at fourth grade students on the first semester at SD Negeri 1 Bayeun on the academic year of 2016/2017.

d. Research Significance

The significances of this study are in the following.

1. For students, this research could improve learning achievement and could train students to be aware of the outcome of learning.
2. For teachers, this research could be a reference in applying certain learning model.
3. For institutions, this research could be a consideration in taking making decisions and policies to improve learning quality, particularly for Social Science.

Literature Review and Method

a. Understanding of Learning Achievement

Wahmuji (2008:47) explained that learning achievement consisted of two terms: learning and achievement. Achievement referred to the outcome of learning activities (from what they doing, practicing, and so on). Thus learning achievement was the mastery on knowledge or skills of certain subject, which reflected by the score on test given in the end of learning process.

Ratumanan (2002:3) added that the learning achievement showed the learning quality during certain period, such as in semester, in a year and so on. Then learning performance referred to shorter period, such as for each chapter of lesson, daily review, etc.

b. Factors influencing learning achievement

Slameto (2010:54) mentioned many factors influencing learning achievements, yet they could be generalized into external and internal factors. Internal factors were caused by the individual aspects, namely:

1. Physical factors, including health and physical constraints;
2. Physiological factors, including intelligence, attention, interest, talent, motive, maturity, and awareness;
3. Exhaustion factors, for physical it referring to weak body and for psychological it referring to boredom.

Then, the external factors referred to the influence by environment. Slameto (2010:60) added that the external factors included family, school, and society.

- Family
  The influence from family included pedagogical patters, relationship among family members, family situation, and economic condition.
- School
  The influence from school encompassed learning method, relationship among teachers and students, discipline, time for teaching, learning standards, facilities, and assignments.
- Society

Society influenced learning achievements by the social activity joining by students, mass media, friend, and social pattern.

c. The Understanding of Natural Resources

Fauzi (2004:17-21) explained natural resources as the natural potencies, including animate and inanimate objects. It was required by every creature for living. Each creature used natural resource by distinctive purposes, such as human who used it to fulfil daily necessities. Natural resources also could be utilized in economic activity.

d. The Use of Natural Resources

Natural resources should be used wisely. Then it could be used sustainably. In Indonesia, the natural resources had to be utilized for people benefit. The utilization of natural resources was different between the people living in the city and those living in the village. People living in the city processed the natural resources by using sophisticated technologies and machineries, while people in village tended to use simple technique. Thus, the utilization of natural resources in the city was more optimum (Sukamto, 1998:77)

e. Relationship between Natural Resources and Economic Activity

People always tried to fulfil the daily necessities. Activity aiming this objective was known as economic activity. The natural resources used within this process included (1) agriculture, (2) plantations, (3) husbandry, (4) fishery, (5) forestation, (6) mining, and (7) industry.

f. Understanding of Guided Discovery Learning

Guided discovery learning was method that built learning situations in which students actively involved in discovering new concept, theory, comprehension, and problem solving. Teacher acted as facilitator and guide during the learning process. The assistance from teacher should support students in discovering something by themselves. In accordance to this explanation, Soejadi (in Suprijno 2010:141) stated that Guided Discovery Learning was a method encouraging students to perform certain activities that led to finding and innovating something significance.

Furthermore, Trianto (2009:188) added that students were involved in answering teachers' questions during learning using Guided Discovery Learning. The process of discovering was done by student; teachers only guided them by using instructions and questioning. Teachers initiated learning by proposing question that led students to certain hypotheses. Students then might perform practices or experiments to examine proposed hypotheses.

Based on those opinions, it could be concluded that Guided Discovery Learning was method actively involved students to discovering new idea. This process was guided by teacher with questions and instructions.

g. Advantages and Disadvantages of Guided Discovery Learning

Guided Discovery Learning method had several advantages and disadvantages, which required further comprehension upon its application. Suryosubroto (2009:185) explained advantages of this method as in the following.

- ✓ Assisting students to develop and to increase skills and cognitive process;
- ✓ Couraging passion in learning, which they could feel the result of their work or failure;
- ✓ Giving opportunities for students to improve themselves;
- ✓ Providing opportunities for students in finding their own learning style that they found motivating;
- ✓ Helping build self-esteem and self-confidence through discovering process;
- ✓ Giving opportunities for students and teachers to interact in examining idea;
- ✓ Developing good sceptic attitude in discovering conclusion.

Meanwhile, Suryosubroto (2009:186) explained disadvantages of this method, as in the following.

- ✓ It is inappropriate to be implemented in a class with many students.
- ✓ It may not meet the expectation of teacher and students who have been accustomed with conventional method.
- ✓ It only focuses on the comprehension; it is not suitable to build attitude and skills.
- ✓ In several subject (as in Social Science), resources facilitating the implementation may not available.

h. Steps on Applying Guided Learning Method

Suryosubroto (2009:184-185) mentioned steps for applying this method, as in the following.

- ✓ Identification of students' need,
- ✓ Initial selection upon principles, the nature of concepts, and the generalization made during learning,
- ✓ Material and assignment design,
- ✓ Assistance provided for learners,
- ✓ Learnt problems,

- ✓ The role of students,
- ✓ Classroom preparation,
- ✓ Examining students' comprehension upon problems;
- ✓ Giving opportunities for students to discover;
- ✓ Providing help by giving information and data;
- ✓ Guiding self-analysis by using question and process identifying,
- ✓ Couraging interaction among students
- ✓ Giving rewards and complimenting students,
- ✓ Assisting students in generalizing principles.

i. Theoretical Framework

Learning social science on the lesson of Natural Resources and Economic Activity using Guided Discovery Learning was a cooperative learning session, which students learnt in heterogenic groups, consisted of 4-5 students. They arranged, organized, and analyzed the given data, then discovering concept and accomplishing assignments. By the end of learning, teacher gave reward for students. During the lesson, students were required to be active in communicating and delivering ideas while accomplishing given assignments.

The activity of delivering and communicating ideas was an effective learning process. Then, as better the learning process, the better learning achievements would be.

j. Research Hypothesis

Based on the literature review and theoretical framework, the hypothesis on this research was that "Guided Learning Method could improve students' learning achievements on social science at the lesson of natural resources and economic activity at fourth grade students on the first semester at SD Negeri 1 Bayeun on the academic year of 2016/2017".

k. Research Setting

This study was conducted for fourth grade students on the first semester at SD Negeri 1 Bayeun on the academic year of 2016/2017 from August until November 2016. Thus, subject in this research was 4th grade students in that school, which included 24 students consisted of 8 males and 16 females.

l. Research Procedure

To reach the objectives of research, the procedure used was Classroom Action Reseach based on the model by Kemnis and Mc. Taggart (in Arikunto, 2003:79). This model had several phases: planning, implementation, observation, and reflective evaluation. Those four phases was conducted into cyclical activities, which could be repeated until the objectives reached.

m. Research Indicators

The indicator of success was the existence of improvement upon students' learning achievement for Social Science. Quantitatively, it meant that at least 85% of students gained better comprehension upon learning. It was reflected by their ability in answering test.

Meanwhile, the indicator of success also could be observed during the learning process. While 85% of students had actively involved and participated in learning process indicated that teacher had successfully applied the method.

n. Data Collecting Technic and Instruments

The data were collected by using test in the end of Cycle I and Cyle II. The test was used to get the data regarding students' achievement upon learning. Furthermore, the observation was also conveyed during learning process. The observation sheet was made as the guidance upon this data collecting process. Observation was done to gain data regarding learning activity, particularly focusing on phenomena and students attitude during learning by Guided Discovery Learning.

o. Data Analysis Technic

The analysis was conveyed by using descriptive qualitative analysis, which included the following.

1. Comparative descriptive analysis on the learning achievement was done to compare the outcome of learning between Cycle I and Cycle II, as well as compared the indicators achievement between Cycle I and Cycle II.
2. Descriptive qualitative analysis was done for comparing the result of observations and reflective evaluation on the Cycle I and Cycle II.

Result

a. Initial Result of Learning Achievement

The initial result of learning achievement indicated that students' score on Social Science was still unsatisfied. Such condition was caused by the conventional method used during learning; the material also too much that need strong memory for remembering it. Before the application of Guided Discovery Learning, teacher held initial test. This initial test indicated that only 13 students (54,17% of total subjects) passed the Minimum Passing Criteria, which was 70. The rest 11 students (45,83% of total subjects) did not achieve

sufficient score for passing. The highest score was 85 and the lowest score was 40, then the average score was 63,96.

The initial condition also indicated that the students did not actively participated during learning process. It occurred since there was not challenging response provided during classroom activities. Students were observed for working individually, which led to uncreative learning environments. As the excess, learning atmosphere was monotonous that caused lesson uninteresting and was not meaningful.

b. The Learning Results of Cycle I

The learning result in cycle I pointed out that there was only 1 student who scored 95 (4,17%), 1 student who scored 90 (4,17%), 3 students who scored 85 (12,50%), 5 students who scored 80 (20,83%), 4 students who scored 75 (16,67%), 5 students who scored 70 (20,83%), 2 students who scored 65 (8,33%), 1 student who scored 60 (4,17%), 1 student who scored 55 (4,17%), and 1 student who got the lowest score, 50 (4,17%).

Based on the Minimum Completeness Criteria, out of 24 students, there were only 19 students (79,17%) who passed the required criteria, ≥ 70. The rest of them, 5 students, had not reached the criteria. Meanwhile, the highest score obtained by them was 95, whereas the lowest score was 50, with the average score of 74,38.

The learning result in cycle I slightly changed although the result did not meet the target. One of factors causing the result in cycle I was that not all group members actively participated in doing group activities. The students did not focus properly and tended to rely solely on their friends who were smarter. Besides, they joked each other in a group. In addition, during the learning process, most students were less inclined to get involved actively in data discussion. When the data discussion classically took place, they did not enthusiastically volunteer to demonstrate their result of group discussion. Conversely, the teacher had to appoint the group instead of presenting the result voluntarily. The pupils also had not been enthusiastic in giving feedback or commenting the results of the presentation since the teacher just simply asked that if anyone would like to give a response or not. Additionally, the teacher continued the presentation to other group if there was no any respond conveyed by the students. This finding indicates that the teacher had not been maximal in providing guidance to them, especially when the learning process took place.

c. The Learning Results of Cycle II

The results on cycle II shows that there was 1 student who scored 100 (4,17%), 2 students who scored 95 (8,33%), 3 students who scored 90 (12,5%), 5 students who scored 85 (20,83%), 5 students who scored 80 (20,83%), 2 students who scored 75 (8,33%), and 5 students who scored the lowest mark, 70 (20,83%). Out of 24 students, all of them (100%) had already passed the KKM (Minimum Completeness Criteria) of ≥ 70. The highest score was 100, while the lowest one was 70, with the average score 82,71.

The learning process in cycle II shows that all pupils were actively involved in learning activities. This was caused all of them were active. Besides, the distribution of the task within the groups was even. Hence, the cooperation among students in a group was doing well. Each student becomes more focused with the group activities in seeking an information constructed by himself. In addition, the teacher also gave the awards to the students who participated in discussing the data. This action triggered the students to present the result of group discussion and to provide feedback while the data discussion was taking place. The award granting meant to the students made them more enthusiastic to join the learning process.

Based on the observation, using an optimal method of Guided Discovery Learning in social science, particularly for the material of Natural Resources and Economic Activities, was capable to enhance the learning results and the student skills upon the subject. In other words, this research is assumed success and it is terminated in cycle II. If the learning result in the initial condition is compared with the cycle I and II, it will be depicted in the following table and chart:

Table 1. The Summary of Learning Completeness in Initial Condition, Cycle I, and Cycle II

No.	Completeness	The Number of Students					
		Initial Condition		Cycle I		Cycle II	
		Total	Percentage	Total	Percentage	Total	Percent
1	Complete	13	54,17 %	19	79,17 %	24	100 %
2	Incomplete	11	45,83 %	5	20,83 %	-	-
Total		24	100 %	24	100 %	24	100 %

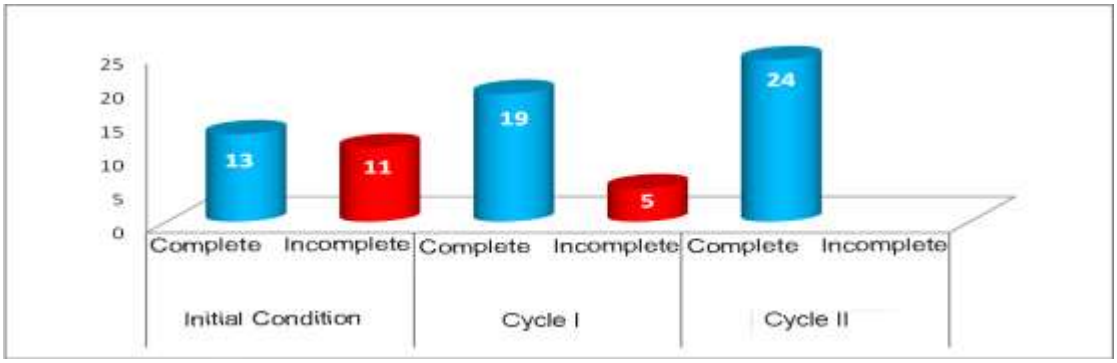

Figure 1. The Chart of Completeness Summary in Initial Condition, Cycle I, and Cycle II

Based on the data displayed in the table and chart above, in initial condition, there were only 13 students (54,17%) who passed the criteria score. Meanwhile, in cycle II, there were 19 students (79,17%) who passed the expected criteria. Surprisingly, all 24 students of four grade scored 100%. In addition to the learning completeness, the summary of average score obtained in the initial condition, cycle I, and cycle II can be displayed as the following table and chart:

Table 2. The Summary of Students' Average Score in Initial Condition, Cycle I, and Cycle II

No.	Description	Initial Condition	Cycle I	Cycle II
1	The highest score	85	95	100
2	The lowest score	40	50	70
3	Total Score	1535	1785	1985
4	Average Score	63,96	74,38	82,71

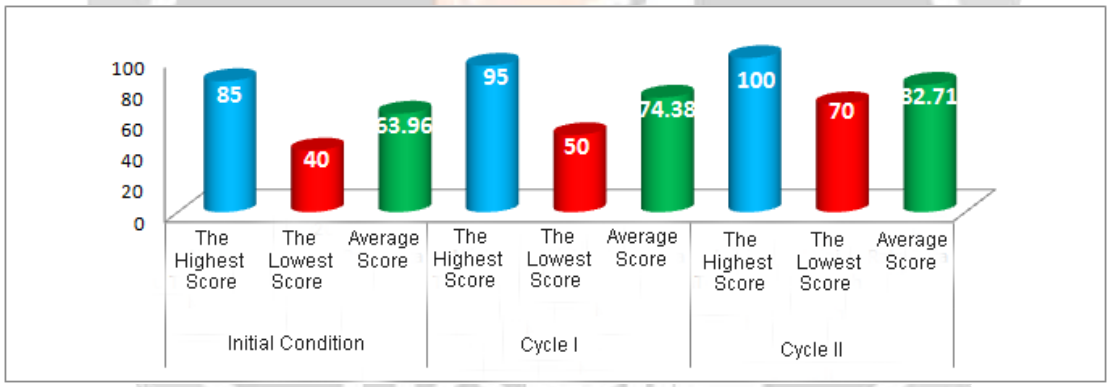

Figure 2. The Chart of the Students' Average Score in Initial Condition, Cycle I, and Cycle II

Based on the summary in the table and chart above, the average score of the students in initial condition was 63,96 with 85 as the highest score and 40 as the lowest one. Meanwhile, in cycle I, the average score of the students increased to 74,38 with 95 as the highest score and 50 as the lowest score. Moreover, the average score of them was increased to 82,71 with 100 as the maximum score and 70 as the minimum score. The results indicate that the method of Guided Discovery Learning is able to improve the learning result of social science, specifically for the material of "Natural Resources bad Economic Activities" upon the four grade students in first semester at SD Negeri 1 Bayeun of the academic year 2016/2017.

Conclusion and Suggestion

a. Conclusion

Based on the results of research related to the learning result of social science, then, it can be summed up as follows:

1. The implementation of the method of Guided Discovery Learning applied optimally was able to evoke the students' learning passion since they experienced their effort in conduction the discovery activities.
2. In the initial condition without applying the method of Guided Discovery Learning, there were only 13 students (54,17%) having the average score of 62,96 from 24 students in total. Meanwhile, the method of Guided Discovery Learning in cycle I succeed to increase the average score of the students, 74,38. In that cycle, 19 students (79,17%) passed the completeness criteria. Additionally, after making improvement over the deficiencies in cycle I, all students (100%) finally passed the minimum criteri with the average score of 82,71.

b. Suggestion

Based on the research results and conclusions against the findings above, the writer recommends several suggestions as follows:

1. In learning Social Science, the teacher should apply the method of Guided Discovery Learning as one of alternative methods in improving learning result of students, specifically in primary school.
2. Through the method of Guided Discovery Learning, the teacher may easily respond any potential or modality of his students in every activity of group learning. Hence, a professional teacher can perform effectively the process of teaching and learning. He can also easily react to the difference potential belonged to his protégés.
3. In addition to the method of Guided Discovery Learning, a teacher can also implement other methods, which are more varied in order to examine and compare the learning outcome.

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