Panicgogy International Journal

Editor-in-Chief: Dr. Muhamad Galang Isnawan

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Abstract
The research titled "Increasing the Discussion Ability of Science Subjects through the Application of the Jigsaw Method for Class VI Students at SDN 8 Steps in 2022" conducted at SDN 8 Langkahan, Langkahan Regency, aimed to enhance the discussion skills of Class VI students using the Jigsaw Method. This method was chosen for its effectiveness in promoting collaborative learning and active participation among students. Classroom Action Research was employed as the research methodology, involving 30 teachers at SDN 8 Langkahan. The research design adhered to the principles outlined by Kemmis and McTaggart. Data was collected through various methods including observation, field notes, and documentation. The analysis of the data implemented descriptive statistics to gauge the effectiveness of the Jigsaw Method in improving discussion skills. The findings revealed a significant increase in the average discussion ability score from before cycle I to cycle II. Specifically, there was an impressive rise from an initial score of 45 to 68.94 after the second cycle, indicating a substantial improvement of 23.94 points. These results underscore the efficacy of the Jigsaw Method in fostering enhanced discussion abilities among Class VI students at SDN 8 Langkahan. By actively engaging students in collaborative learning experiences, the method not only enhances their understanding of science subjects but also cultivates vital communication and teamwork skills essential for their academic and personal development.
Keywords: Jigsaw Method, Discussion Skills, Science Subjects

1. Introduction

The Republic of Indonesia Government Regulation Number 19 of 2005 concerning National Education Standards Chapter V concerning Process Standards article 19 paragraph (1) states that the learning process in educational units is carried out in an interactive, inspiring, fun, challenging manner, motivating students to participate in active Natural Science, and provide sufficient space for initiative, creativity, and independence by students' talents, interests, and physical and psychological development. Therefore, teachers must be creative in applying methods and creating interactive and fun learning models, so that learning is by what is expected in the Process Standards.

Based on current reflections on teaching and learning activities at SDN 8 Steps, especially in class VI-a, there is still a lack of things related to group collaboration, students' courage to express opinions, speak fluently and, listen attentively, respond to friends' opinions, be skilled convey the results of the discussion. Even though in Natural Sciences Subjects the ability to discuss for students is very important, this is in accordance with the objectives of Natural

Sciences, namely 1) Increasing belief in the greatness of God Almighty based on the existence, beauty and order of His natural creation; 2) Develop an understanding of various natural phenomena, science concepts and principles that are useful and can be applied in everyday life; 3) Develop curiosity, a positive attitude, and awareness of the mutually influencing relationship between science, the environment, technology, and public; 4) Carrying out scientific inquiry to develop the ability to think, behave and act scientifically and communicate; 5) Increase awareness to participate in maintaining, guarding and conserving the environment and natural resources; 6) Increase awareness to respect nature and all its order as one of God's creations;7) Improve science knowledge, concepts and skills as a basis for continuing education to the next level. This is what encourages the author to innovate in teaching and learning activities by conducting Classroom Action Research.

One of the advantages of using the discussion method is that students will be directly involved in the learning process as well. Partis Natural Sciences or as group leader where each student is allowed to participate in Natural Sciences, especially in small groups to develop their intellectual processes, as well as foster a tolerant attitude by being aware of differences in views. Through discussion, feelings are also fostered which in fact can change attitudes and behavior that other techniques or methods find difficult to influence. Because discussions involve as many students as possible in the learning process, they will help warm up the class atmosphere. However, in addition to the advantages of the discussion technique, it also contains weaknesses, including, even if the discussion strategy is well organized, it does not guarantee the implementation of the group agreement, also the discussion is difficult to predict because it may turn out to be aimless or "free-for-all" especially if the discussion leader unproductive, as a result discussion easily become endless or undirected discussions and become a place for stupidity to unite (Wahab, 2007). Cooperative learning is a learning strategy that prioritizes cooperation, namely cooperation between students in groups to achieve learning goals (Johnson & Johnson, 1987). Students are divided into small groups and directed to study the specified lesson material. The goal of cooperative learning is to generate effective interaction among group members through discussion. Most activities are student-centered, namely learning lesson material, discuss to solve problems (tasks).

Jigsaw style learning (arranging pieces of images), this technique is similar to group-to-group exchange, but there is one important difference, namely that each student teaches something. Each student learns something, which, when combined with material learned by other students, forms a coherent body of knowledge or skills. (Silberman, 2004) Jigsaw II is an adaptation of Elliot Aronson's Jigsaw technique (1978). In Jigsaw II, students work in groups of four, which is similar to heterogeneous teams such as in STAD and TGT. Students are assigned to read chapters or small books, generally social studies, biographies, or other informational material. Each team member is randomly assigned to be an "expert" on some aspect of the reading assignment. When everyone has finished reading, students from different teams with the same topic meet in an "expert group" to discuss their topic for approximately 30 minutes. These experts then return to their home teams and take turns teaching their teammates about topics in their

Original Article

"expertise." Finally, students are given a quiz on all topics, and the percentage of the quiz students' discussion ability becomes the percentage of the team students' discussion ability. Jigsaw can be used if the material being studied is in the form of a written narrative. Jigsaw II is most suitable for application in social science subjects, literature, several sections of science, and other fields of study where the lesson objectives place more emphasis on concepts from natural science and skills. Teaching materials for Jigsaw II are usually chapters, stories, biographies and other descriptive materials (Slavin in Nur, 2004).

2. Methods

The method used in this research is Classroom Action Research (CAR). This is based on the problems that occurred in Class VI of SDN 8 Langkahan. where most students experienced using the Jigsaw method to improve discussion skills. So, CAR needs to be implemented to resolve this problem.

CAR is research carried out by teachers in the author's class through self-reflection activities, to improve their performance as a teacher to increase students' reading comprehension skills. The CAR model used in this research is the Kemmis and McTaggart CAR model.

Kemmis and McTanggart's model is a model that has been the main reference for Classroom Action Research (CAR). Kemmis and McTaggart were the first person to introduce action research. Kemmis and McTanggart stated that one cycle of classroom action research consists of four stages, namely: (1) planning; (2) action (acting); (3) observation (observing); and (4) reflection (reflecting). The scheme of the Classroom Action Research model according to Kemmis and Mc Tanggart can be seen in Figure 1.

Figure 1
Kemmis and McTanggart Classroom Action Research
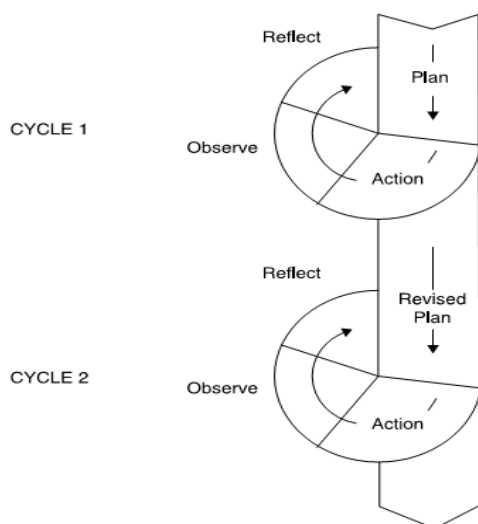
The subjects in this research were 30 class VI students at SDN 8 Langkahan for the 2022/2023 academic year. The research instruments used in CAR are divided into two types, namely learning instruments and data collection instruments. Learning instruments consist of Learning Implementation Plans, student worksheets, Teaching Modules, and Learning Media. Meanwhile, the data

collection instrument consists of test sheets, observation sheets, and student response questionnaires. The implementation process for each cycle is divided into four stages, namely the planning, implementation, observation, and reflection stages.

The preparation of the plan is based on the results of the initial reflection. In detail, planning includes actions that will be taken to improve, increase or change the desired behavior and attitudes as a solution to problems. This planning is flexible, meaning it can change according to existing real conditions. Implementation of actions concerns what is done as an effort to improve, increase, or change which is carried out based on the action plan.

Observation activities can be equated with data collection activities in formal research. In this activity, the results or impact of the actions carried out on students are observed. Reflection is carried out or imposed on students. Reflection is an activity of analysis, synthesis, and interpretation of all information obtained during action activities. In this activity, researchers' study, see, and consider the results or impacts of actions. Every piece of information collected needs to be studied about each other and its relation to the JIGSAW learning model.

3. Research Results and Discussion

Implementation of the actions carried out in cycle I and cycle II showed a significant increase in learning outcomes as expected. This shows an increase in the discussion skills of class VI students using the JIGSAW. Individually, the number of students was 30. 15 students were able to discuss in cycle 1. The percentage of students who were able to discuss in Cycle 1 was 15: 30 x 100% = 50%. Meanwhile, 15 students were not able to discuss Cycle 1. Percentage of students who were not able to discuss in Cycle 1 = 15: 30 x 100% = 50%. In cycle 2 action, 17 students were able to discuss learning. The percentage of students who were able to discuss in Cycle 2 was 17: 30 x 100% = 56.67%. 13 students were not able to discuss in Cycle 2. The percentage of students who were not able to discuss in Cycle 2 was 13: 30 x 100% = 43.33%. Classically, Class VI students are not yet able to discuss learning because according to the standards, the ability to discuss learning classically must reach 80%, while the achievement of learning outcomes after cycle 1 has only reached 50%, so the ability to achieve classical discussion is still less than 50%. After corrective actions were carried out in cycle 2, 13 students were unable to discuss. Achievement of learning outcomes after cycle 2 reached 56.67%. So to achieve classical discussion skills it is still lacking at 43.33%.

The average percentage of students' discussion abilities before improvement = 45. The average percentage of students' discussion abilities after Cycle 1 = 54. The average percentage of students' discussion abilities after Cycle 2 = 68.94. Percentage gain in students' discussion skills on average in Cycle 1 = 9. Average percentage gain in students' discussion skills in Cycle 2 = 23.94. From these data, information was obtained that there was an increase in students' discussion skills. Thus, the results of this research discussion are as follows: There is an increase in students' discussion skills using the jigsaw method for Class VI students at SDN 8 Langkahan Learning improvements have been achieved because the percentage gain in students' discussion skills was 23.94 on average between before learning improvements and after cycle 2 of learning improvements. Students' discussion skills have increased because students' ability to discuss has reached 56.67%. 13

students were not able to discuss individually, reaching 43.33%. It is estimated that students are unable to discuss because some students are not focused during the learning process, so when teaching and learning activities take place, these students cannot interact with their peers properly.

Table 1

Increased discussion among students

Information	Cycle I	Cycle II
The number of students	30	30
The highest score	81,67	95,83
Lowest score	38,33	53,33
Students who achieve KKM	15	17
Students who do not achieve KKM	15	13
Average Value	54%	68,94%

4. Conclusion

From the results of the research and discussion outlined in CHAPTER IV above, the results of this research can be concluded as follows: The Jigsaw method can improve students' discussion skills. There was an increase in student scores after learning improvements were carried out. There is an increase in the average discussion ability score until cycle II and they already have discussion skills. Increase in average discussion ability from before cycle I to cycle II for Class VI students at SDN 8 Langkahan from 45 to 68.94 so there is an increase of 23.94. From the results of this research, researchers provide suggestions for teachers and students, as follows:

a) This research can be carried out further to further support the results of this research.
b) In learning, teachers need to consider the sequence or hierarchy of each competency.
c) To motivate students, teachers need to design assignments, and assignments that have been given to students need to be discussed again at the next meeting.
d) In the learning process, optimize discussion and question-and-answer methods both in cultivating concepts, finding formulas and, as well as discussing questions.
e) When carrying out the Jigsaw Method, you need to pay attention to the implementation steps, so that you can increase students' grades to the maximum and achieve classical learning completeness.
f) Time management for introductions and administrative matters, for example dividing groups, in class needs attention, so that study time is not spent on administrative matters.

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