

## Implementation Of The Cooperative Learning Model Type Two Stay Two Stray to Upgrade Science Learning Outcomes

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### ABSTRACT

Science lessons are subjects that make us think and reason and be able to solve existing problems. The low scores of students in science subjects are due to the fact that the learning process is still conventional and does not involve students. The solution provided by researchers to overcome this problem is to provide action on the learning process in the form of classroom action research with the Two Stay Two Stray Cooperative Learning Model. This research consisted of two cycles where each cycle started from planning, implementing, observing and reflecting. The Two Stay Two Stray cooperative learning model is a learning that prioritizes student activity and cooperation in finding, answer and report information to small groups cooperatively with the aim of being the first group to complete a set of questions. The purpose of this study is to describe student learning outcomes by applying the Two Stay Two Stray Learning model and to describe the learning process by applying the Two Stay Two Stray Cooperative learning model. This research was conducted from August to September 2022 in class VII-A of SMP Negeri 1 Hiliduho, with 20 students, 6 boys and 14 girls. The results of this study were that student learning outcomes in science lessons increased with the application of the Two Stay Two Stray Cooperative learning model, where at the end of the cycle the average student learning outcomes reached 80, 6 with a learning completeness percentage of 90% and the learning process in science subjects is improved by applying the Type Two Stay Two Stray Cooperative learning model where at the end of the cycle the average result of the observation sheet reaches 84% and has reached the target set at 75%. Thus it can be concluded that student learning outcomes in science lessons increased with the application of the Two Stay Two Stray Cooperative learning model and the learning process in science subjects was improved by the application of the Two Stay Two Stray Cooperative learning model.

**Keyword :** Two Stay Two Stray Cooperative Model, Learning Outcomes

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## 1. INTRODUCTION

Along with the development of science and technology, quality human resources are required to be able to compete globally. So that it requires highly skilled human beings, critical thinkers, systematic, logical, creative, willingness to work together and a positive attitude. This is inseparable from education. Because education functions to develop abilities and to shape human character so that they become intelligent and can develop all their potential so that they can create quality human resources. Therefore, teachers as educators should be able to create a learning environment that can develop the potential of students and can involve students actively in the teaching and learning process. Therefore, But in fact, as far as the researcher's observations are concerned, various learning models, approaches, and strategies are rarely used. Classroom learning activities still use the lecture and note-taking method. Classes tend to be dominated by the teacher, while students listen and take notes. This creates feelings of boredom and boredom, causing students to be reluctant to think and students not trained to be able

to develop their ideas. As a result, when given the opportunity to ask questions, only a few students dared to ask questions about things that raised their doubts. As a result, the average student learning outcomes of SMP Negeri 1 Hiliduho for the Mid Semester Assessment and Even Semester Final Assessment are in the less category.

To overcome this problem the teacher should provide opportunities for students to be more actively involved in the teaching and learning process so as to generate student interest and motivation in learning. One of the learning models that can generate student interest and motivation is the cooperative learning model of the two stay two stray type. Based on the description above, the researcher wishes to carry out scientific research. The research that will be carried out is Classroom Action Research by applying the Two Stay Two Stray Cooperative Learning Model in improving science learning outcomes at SMP Negeri 1 Hiliduho in the 2022/2023 Academic Year. The objectives of this study are (1) to describe the science learning process by applying the two stay two stray cooperative learning model (2) to describe the average student learning outcomes by applying the two stay two stray cooperative learning model. This research can be useful as input material for teachers in choosing and applying appropriate learning models in the teaching and learning process (KBM) and add insight to researchers as teachers in the future in selecting and using appropriate learning models in the teaching and learning process

## 2. RESEARCH METHOD

Based on the objectives to be achieved, this research was carried out by implementing Classroom Action Research (CAR). Classroom Action Research (CAR) is conducted with the aim of improving the learning process. Therefore, this study focuses on the learning process in the classroom. The object of action (object of research) in this study are as follows:

1. Application of the Two Stay Two Stray Cooperative Learning Model in the science learning process
2. Improving student learning outcomes in science subjects through the Two Stay Two Stray Cooperative Learning Model.

The location for implementing this Classroom Action Research is SMP Negeri 1 Hiliduho which is located in Hiliduho District, Nias Regency. The subjects of this study were students of Class VII-A even semester at SMP Negeri 1 Hiliduho for the 2022/2023 academic year. The subjects of this study were 20 people consisting of 6 men and 14 women. This Classroom Action Research is in accordance with the plan to be carried out in the even semester of the 2022/2023 school year. The implementation of the actions in this study was adjusted to the schedule at school. The implementation of the action is carried out for approximately one month and each cycle is planned for 3 meetings and 1 meeting for daily exams in the form of student learning outcomes tests. To collect data in this study used research instruments, namely (1) Observation Sheets, (2) Questionnaires, (3) Learning achievement tests, (4) Interview guide sheets, (5) Documentation in the form of photographs.

## 3. RESULTS AND DISCUSSION

Based on the average reflection results at the end of the first cycle of implementing the learning process obtained through observation sheets and learning achievement tests, it turned out to be 62.2% and did not reach the predetermined target (75%), this shows that there are still deficiencies in the learning process and student learning outcomes still do not meet the target, so this research is continued in cycle II. Based on the average reflection results at the end of cycle II, it turned out that 84% was obtained and had reached the predetermined target (75%). This shows that the learning process using the Two Stay Two Stray Cooperative Learning Model can be improved and student learning outcomes have increased.

### A. Data Exposure Every Cycle 1

The learning materials in cycle I are: Acid and base. The meeting in cycle I, as planned, was carried out in accordance with the steps of the Two stay two stray learning model. The implementation of the learning process in cycle I begins with the delivery of material briefly by the teacher acid and base learning materials. Learning will be carried out according to the stages of the Two stay two stray learning model which starts with the teacher dividing students into several groups of 4-5 people, the teacher distributes material to each group and students work together in groups of four as usual, after completion, two people from each becomes a guest of the other two groups, two people who live in the group are in charge of sharing work results and information with their guests, guests excuse themselves and return to their own groups and report their findings from other groups, groups match and discuss

the results of their work, teachers and students make conclusions. The learning process that took place in the first cycle at least encountered several obstacles. Based on the observations of researchers, it seems that students are still not fully able to place themselves in their respective groups. Likewise, the interest and activeness of students has not been fully visible and even most students have not been able to provide a response to the problem to be solved so that the researcher plans to return to the improvement of this research by continuing in the implementation of cycle II. Based on the results of data collection at the first meeting of the first cycle, it was found that: (1) The average results of observations of students who actively participated in learning reached 52% (2) The results of observations of the learning process of teacher respondents reached 53%. Based on the results of data collection at the second meeting of the first cycle, it was found that: (1) The average results of observations of students who actively participate in learning reach 67% (2) The results of the observation of the learning process of the teacher respondents reached 62%. While at the end of cycle I, the average student learning outcomes were 68.9 in the sufficient category and the percentage of student learning completeness reached 70%.

### ***B. Data Exposure Every Cycle 2***

Implementation of the learning process in cycle II begins with the delivery of material briefly by the teacher with material on understanding the acidic and basic properties of a substance. Learning will be carried out according to the stages of the Two stay two stray learning model which starts with the teacher dividing students into several groups of 4 (four) people, the teacher distributes material to each group and students work together in groups of four as usual, after completion, two people from each being the guest of the other two groups, two people who live in the group are in charge of sharing work results and information with their guests, guests excuse themselves and return to their own groups and report their findings from other groups, groups match and discuss work results they, the teacher and the students make conclusions. The learning process in the second cycle saw many developments from the previous meeting. In terms of carrying out student discussions, they are able to manage their own groups to solve the problems faced. It was also seen that almost all group members were active in asking questions and expressing opinions both with group mates and between groups.

Besides that, there are no longer students who are passive and remain silent because each gets an assignment from the group and the interest, attention and percentage of students also improves. Based on the results of data collection at the first meeting of the second cycle, it was found that: (1) The average results of observations of students who actively participated in learning reached 72% (2) The results of observations of the learning process of teacher respondents reached 72%. Based on the results of data collection at the second meeting of cycle II, it was found that: (1) The average results of observations of students who actively participate in learning reach 90% (2) The results of the observation of the learning process of the teacher respondents reached 90% while at the end of cycle II the average student learning outcomes was 80.6 in the good category and the percentage of student learning completeness reached 90%.

## **4. CONCLUSION**

Based on the processing and analysis of research data that has been carried out regarding the application of the Two Stay Two Stray Cooperative Learning Model in the science learning process in Class VII-A odd semester of SMP Negeri 1 Hiliduho for the 2022/2023 academic year, the researchers conclude as follows: (1) The science learning process was improved by applying the Two stay two stray Learning Model in class VII-A SMP Negeri 1 Hiliduho on Material Acids, Bases and Salts where the average result of reflection at the end of the cycle reaches 84%. (2) Student learning outcomes in class VII-A SMP Negeri 1 Hiliduho increased with the application of the Two stay two stray Learning Model where at the end of the cycle the average student learning outcomes reached 80.6 with a completeness percentage of 90%

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