



# The Effectiveness of Cooperative Team Accelerated Instruction Type in Thematic Learning For Grade 5 Students of 1 Sewon Elementary School

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## ABSTRACT

The purpose of this study was to show the effectiveness of the TAI-type cooperative method in thematic learning for fifth-grade students of SD N 1 Sewon on: 1) students' learning motivation in the thematic learning process, and 2) thematic learning achievement. To achieve these objectives, the TAI-type cooperative method was implemented on grade V students of SD Negeri 1 Sewon in the 2022/2023 academic year consisting of 20 people. Data were collected using 1) observation sheets, 2) learning achievement tests, and 3) interviews. Furthermore, the data collected in this study were analyzed descriptively. The results of this study showed that 1) there was an increase in student learning motivation, namely in cycle 1 of 72% (sufficient) and cycle 2 reached 80% (good), cycle 3 reached 91% (very good), 2) there was an increase in student learning achievement, namely in cycle I with an average class score of 67.88 and in cycle II to 74.69, absorption increased from cycle 1 achievement of KKM by 12 children, cycle 2 reached 16 children and cycle 3 reached 19 children. This shows that the use of the Team Accelerated Instruction (TAI) type cooperative learning model effectively increases participation and learning achievement in thematic subjects of theme 8 Environment of Our Friends.

**Keywords:** cooperative learning, TAI type, learning motivation, learning achievement

## 1. INTRODUCTION

Learning is an effort to direct students into the learning process to obtain learning objectives. Thus, for learning objectives to be achieved, an appropriate strategy must be formulated. A learning strategy is a systematic way of communicating lesson content to students to achieve specific learning objectives.

Teachers play an important role in the learning process. To carry out its role in learning, a teacher must have a broad and complete insight into the learning process in the classroom. A teacher understands what steps must be taken so that his/her teaching tasks can be carried out optimally to achieve learning objectives.

In learning activities, the presence of students is greatly influenced by teacher assistance. Teachers as a source of knowledge are required to be able to provide their knowledge to their students. A teacher must be able to choose the right way to achieve the desired learning based on the character of the students and the existing subjects.

Thematic is a group of subjects consisting of Indonesian Language, Science, Civics, Social Studies, and SBdP taught in elementary schools. thematic is a general science that underlies the development of science in various disciplines and advances human thinking. However, some students consider thematic subjects to be avoided even because they are boring.

Learning motivation is a driving force within students that gives learning enthusiasm, direction, and persistence in behavior to achieve a learning goal. 6 factors can affect students' learning motivation, namely ideals and appreciation, student abilities, student conditions, environmental conditions, dynamic elements in learning and learning, and teacher efforts in teaching students. These factors can encourage students in learning activities.

Learning achievement is something that is produced by the efforts made in the learning process. Learning outcomes or achievements are marked by changes in knowledge, attitudes, or skills in a person in the learning process. How to measure learning achievement by

conducting tests, the test results are expressed by learning achievement scores in the form of letters or numbers.

Active and participative students can be implemented in cooperative learning. This learning model maximizes learning activities by grouping students in small groups and learning together. There are various kinds of cooperative learning models including the Team Accelerated Instruction (TAI) type. The Team Accelerated Instruction (TAI) Cooperative Learning Model is a model that requires students to play an active role during the learning process so that students can find answers to the problems faced. The characteristic of this type of TAI is that each student individually learns the material that has been prepared by the teacher. Individual learning achievements are brought to groups for discussion and mutual discussion by group members, and all group members are responsible for the overall answer as a shared responsibility.

Based on the results of observations in class V SD 1 Sewon Bantul on Wednesday 29 March 2023, during teaching and learning activities showed that interest and motivation in thematic subjects were still low. This was clearly shown by the behavior and conditions that were

not conducive, 4 children were seen busy on their own when the teacher explained the material, some students were busy chatting with their classmates, and some put their heads on the table.

The enthusiasm of learners to participate in learning is very lacking, characterized by students who are busy and some are sleepy when the teacher teaches thematically. When a friend asked a question, most of the learners in the class also showed an indifferent attitude. This condition is caused by the teacher only using the lecture method. This method makes students tend to be passive and feel bored. Another obstacle is that students tend to be silent when they do not understand the material being taught. Students are less creative or lack the willingness to ask questions or try the material taught. The situation mentioned above causes low learning motivation in the following thematic subject matter.

These problems are in line with the results of the PTS assessment for semester 2 of the 2022/2023 academic year, which showed that many students scored below the KKM. SD 1 Sewon determines the value of 70 as the KKM for thematic subjects. The following are the PTS Semester 2 results:

**Table 1.** PTS 2 Assessment Results

No.	Students	Above KKM	Below KKM
1	Women	7	3
2	Male	-	10
Total		7	13

The learning model used by the teacher is still conventional. The teacher uses a learning model with the lecture method. Students tend to only listen, write, and do the tasks given by the teacher, making students more passive in the classroom. Such a learning process causes most students to not listen, get bored, and be less interested in thematic subjects. Teachers must apply varied learning models and be able to create fun learning, so that students can actively participate, to bring to life an active classroom atmosphere and the objectives of learning are achieved.

So the alternative solution used to solve the problems that arise in thematic learning is to use the Team Accelerated Instruction type Cooperative Learning model.

According to Nikadek, the steps of Cooperative Learning type TAI are giving assignments, giving individual quizzes, forming groups according to the ability of each student, group discussions of each other's results and checking answers, making summaries and

Team Accelerated Instruction is a type of cooperative learning originally called Team Assisted Individualisation or individualized assistance in groups.

The Team Accelerated Instruction type Cooperative Learning model is a student-centered learning strategy. According to Robert Slavin [1], Team Accelerated Instruction is a pedagogical program that seeks to adapt learning to the individual differences of students academically.

According to Lidza, it starts with self-study and then is brought to group discussions [2]. the teacher prepares special material for each student. The results of the student's work will later be combined with other friends in one group. Each group member is responsible for the work of the group.

affirmations, giving individual quizzes, and giving group appreciation based on group scores [3]. By applying cooperative team accelerated instruction type in thematic learning theme 8 Environment of Our Friends, fifth-grade students of SD N 1 Sewon can

overcome the problems that affect student's learning motivation and learning achievement.

## 2. RESEARCH METHODS

The method explains the design of activities, scope or object, main materials, and tools, the approach used in this research is quantitative and uses the Classroom Action Research (PTK) method. Often various problems arise from daily practices that are felt directly by teachers and students in the classroom. The problem in question is a problem related to the learning process.

Wardani argues that classroom action research is also research, which in itself has various rules and steps that must be followed. Classroom action research is a translation of Classroom Action Research, which is an Action Research conducted in the classroom [4]. Wardani suggests that the main idea of class action research is as follows 1) Action research is a form of inquiry conducted through self-reflection, 2) Action research is conducted by participants involved in the situation under study, such as teachers, students, or principals, 3) Action research is conducted in social situations, including educational situations, 4) The purpose of action research is to improve the rationale and appropriateness of practices, the understanding of those practices, and the situation or institution in which those practices are carried out.[4]

It can be concluded from the description of the experts' opinions on the meaning of PTK above, that Classroom Action Research is a real step that can be taken by teachers or other researchers to find solutions to problems that exist in the classroom in the learning process. Researchers use this method because this research method is very appropriate if used to solve problems that arise in the classroom. After all, (PTK) is very relevant to the need to overcome problems in the classroom. The steps of PTK are planning, implementation, observation, and reflection [4]. The implementation of this PTK was carried out in 3 cycles.

The research was conducted in class V of SD Negeri 1 Sewon. The time used since the PTS assessment has been corrected and analyzed. The research was carried

## 3. RESULTS AND DISCUSSION

This study was conducted to increase student motivation and learning achievement by applying the Cooperative Learning model of Team Accelerated Instruction (TAI) type in class V SD N Sewon. By applying the Cooperative Learning model of Team Accelerated Instruction (TAI) type, it is expected to increase students' motivation and learning achievement. To find out the increase in learning quality, it will be discussed from the side of teachers and students.

### 3.1. Implementation of the lesson plan

The lesson plan can increase student motivation and learning achievement in learning theme 8 Environment of Our Friends based on data collected from the rubric for preparing lesson plans assessed by the observer (homeroom teacher V) this is done to measure the quality of the lesson plan from each component.

Based on the assessment carried out by researchers from cycles 1 to 3, there has been an increase or improvement. Selection of material, learning steps with indicators, learning media materials, and learning resources. Improvements and improvements can be seen by observers from lesson planning. Learning planning in cycle 1 got a percentage of 77% with good criteria. Cycle 1 planning is considered not good so reflection is carried out. In the reflection activity, it was found that the learning steps were lacking so they were improved in cycle 2 and obtained a percentage of success of 86% with good criteria. Before doing cycle 3, a reflection was carried out by improving the learning media because it was felt that it was still not optimal in cycle 2, it was improved in cycle 3 and obtained a percentage of success of 92% with very good criteria.

Data on the improvement of lesson plans in cycles 1 to 3 prepared using the Team Accelerated Instruction (TAI) cooperative method in class 5 SD N 1 Sewon are presented in the following table:

**Table 2.** Lesson plan observation results

Cycle	Percentage	Criteria
1	76%	Simply
2	86%	Good
3	92%	Very good

### 3.2. Implementation of learning

The results of the observation of Cycle I, cycle II, and Cycle III show an increase in the implementation of learning carried out by teachers by applying the Cooperative Learning model type Team Accelerated

Instruction (TAI) subtheme of the diversity of cultures of my nation in class V SD N 1 Sewon. In the implementation of the cycle I learning, apperception activities and class mastery received fewer marks. In the implementation of cycle II, the implementation of learning has improved but there is still something to be improved, namely class conditioning in groups. These deficiencies are corrected in cycle III in the implementation of cycle III learning has improved compared to the previous cycle.

In cycle I the implementation of learning carried out by the teacher is still a lot of improvement. The results of observations made by observers show that the implementation of learning by teachers gets a percentage of success of 77% and gets good criteria. The implementation of learning has improved in the second cycle. The data obtained in cycle II obtained a percentage of success of 85% getting good criteria, the shortcomings in cycle II were corrected in cycle III. The implementation of learning in cycle III has improved compared to the implementation in the previous cycle,

cycle III obtained a percentage of success of 93% getting very good criteria.

Lidza suggests that the steps in the TAI learning model are as follows a) The teacher prepares the teaching materials to be completed by student groups. b) Teachers give pre-tests to students or look at the average daily grades of students so that teachers know students' weaknesses in certain areas. (Adopt Placement Test component). c) The teacher gives the material briefly. (Adopting the Teaching Group component). d) The teacher forms heterogeneous but harmonious small groups based on students' daily test scores, each group of 4-5 students. (Adopting the Teams component). e) Each group works on tasks from the teacher in the form of LKS that have been designed by themselves beforehand, and the teacher provides individual assistance for those who need it. for those who need it. (Adopting the Team Study component). [2]

Data on the improvement of learning implementation in cycles 1 to 3 implemented using the Team Accelerated Instruction (TAI) type co-operative method in class 5 SD N 1 Sewon is presented in the following table:

**Table 3.** Observation results of learning implementation

Cycle	Percentage	Criteria
1	77%	Simply
2	85%	Good
3	93%	Very good

### 3.3. Increased student motivation

The data obtained from the observation of student learning motivation are willingness to attend lessons, participation in learning, doing tasks as directed, resilience in facing learning problems, independence, and ability to express opinions. In cycle 1 several aspects had not yet appeared and improved planning and implementation in cycles 2 and 3.

Student motivation is calculated from the score of the observed aspects. In cycle 1, the class average score obtained a percentage of 72%, in cycle 2 obtained a percentage of 80 and in cycle 3 obtained 91%. This is due

to improvements in learning steps and learning media in planning as well as improvements in apperception and class control in learning implementation.

According to Nana Sujana, several things can cause student activeness in learning. These are learning stimulus, attention, and motivation, learned response, reinforcement, use, and transfer [5]. Some of these things can be done by the teacher to increase student activeness.

The increase in student learning motivation in each cycle that researchers carried out in class V SD N 1 Sewon by using the Team Accelerated Instruction (TAI) type Cooperative model on the theme 8 Environment of Our Friends is presented in the following table:

**Table 4.** Observation Results of Student Learning Motivation

Cycle	Percentage	Criteria
1	72%	Simply
2	80%	Good
3	91%	Very good

**3.4. Discussion on improving student learning achievement**

Data on the improvement of student learning achievement is seen by the change in the percentage of achievement of the cognitive domain value of the end-of-cycle evaluation that reaches the KKM after implementing learning with the Team Accelerated Instruction (TAI) Cooperative model.

Based on the data obtained from the results of the end-of-cycle evaluation test, out of 20 students at the end of cycle 1, 12 students reached the KKM, at the end of cycle 2 there were 16 students reached the KKM, and at the end of cycle 3 there were 19 students reached the KKM.

Sudjana suggests that in learning outcomes there are 3 aspects [5] namely:

- a. Cognitive domain  
Regarding intellectual learning outcomes which consist of six aspects, namely knowledge or memory, understanding, application, analysis, synthesis, and evaluation, the first two aspects are called low-level

cognitive and the next four aspects include high-level cognitive.

- b. Affective domain  
About attitude which consists of five aspects, namely acceptance, response or reaction, assessment, organization, and internalisation. Teachers mostly assess the cognitive domain alone. Affective types of learning outcomes appear in students in various behaviors such as attention to lessons, discipline, motivation to learn, and social relationships.

- c. Psychomotor domain  
Regarding the learning outcomes of skills and action abilities, there are six psychomotor aspects: reflex movements, basic movement skills, perspectival abilities, harmony or complexity, and expressive and interpretive movements.

Learning outcomes improved according to the data on the evaluation results that researchers carried out in class V SD N 1 Sewon by using the Team Accelerated Instruction (TAI) type Cooperative model on the theme 8 Environment of Our Friends presented in the following table:

**Table 5.** Learning evaluation results

Cycle	Above KKM	Below KKM
1	12	8
2	16	4
3	19	1

**3.5. Interview sheet**

From the questions asked by the researcher to the observer, namely the fifth-grade teacher, according to the observer, the Team Accelerated Instruction (TAI) type cooperative learning model is effective in learning 5th-grade students' thematic theme 8 Environment of Our Friends, because this model can increase motivation and learning achievement. Learning is done in groups that can arouse the spirit of competition between groups. Each group is more active and more courageous to ask questions or express opinions so that the class is more lively.

There were 5 fundamental questions related to the model and implementation of the research activities as follows:

- a. What do you think about the use of the Team Accelerated Instruction (TAI) Cooperative learning model in class V thematic theme 8 Environment of Our Friends?

*In my opinion, it is very suitable for the character of grade 5 children who have begun to appear to be the*

*best. This learning model also brings out an attitude of cooperation.*

- b. How is student behavior when using the Team Accelerated Instruction (TAI) Cooperative learning model in class V thematic theme 8 Environment of Our Friends?

*The attitude or behavior of the students is very positive, there is also a division of tasks so that everyone works according to their abilities.*

- c. Is this new learning model able to increase the learning motivation and learning outcomes of students in class V thematic theme 8 Environment of Our Friends?

*From what I observed and from the evaluation results, it continues to improve. Children's motivation continues to improve with their enthusiasm for learning, although there are still one or two children who have not improved significantly. The learning results also at the end almost all reached the KKM, there was only 1 who had not reached the KKM.*

- d. Are there any obstacles to using the learning model offered by the researcher?

*Yes, the obstacle is that there are still children who are not maximally following the lesson and some are not KKM. But maybe it's because of many factors.*

- e. Do you have any suggestions for improving the model offered by the researcher?

*I don't think so because this model is very suitable for thematic learning. Maybe later I will use it for other subjects.*

#### 4. CONCLUSIONS

Learning using the Cooperative Learning Type Team Accelerated Instruction (TAI) model in each cycle has increased. Based on the results of the research and discussion, it can be generally concluded that the use of the Cooperative Learning Type Team Accelerated Instruction (TAI) model can increase the motivation and learning achievement of grade V SD N 1 Sewon thematic subject Theme 8 Environment of Our Friends.

From the lesson plan prepared by researchers in class V SD N 1 Sewon thematic theme 8 Environment of Our Friends, it can be seen that using the Team Accelerated Instruction (TAI) type cooperative learning model can increase student motivation and learning achievement. Learning planning in cycle 1 got a percentage of 77% with good criteria. Cycle 2 and get a percentage of success of 86% with good criteria. Cycle 3 got a percentage of success of 92% with very good criteria.

The Team Accelerated Instruction (TAI) type cooperative learning model in class V SD N 1 Sewon thematic theme 8 Environment of Our Friends can increase learning motivation with evidence of cycle 1 obtaining the average class score a percentage of 72%, cycle 2 obtaining a percentage of 80 and in cycle 3 obtaining 91%.

Data on the improvement of student learning achievement is seen by the change in the percentage of achievement of the cognitive domain value of the end-of-cycle evaluation that reaches the KKM after implementing learning with the Team Accelerated Instruction (TAI) type cooperative learning model. Based on the data obtained from the results of the end-of-cycle evaluation test, out of 20 students at the end of cycle 1 there were 12 students reaching the KKM, at the end of cycle 2 16 students were reaching the KKM, and at the end of cycle 3 19 students were reaching the KKM.

From the description above, it can be concluded that the application of the Team Accelerated Instruction (TAI) type cooperative learning model can increase motivation and learning achievement in class V SD N 1 Sewon thematic theme 8 Environment of Our Friends. This learning model can also be used for other subjects to increase motivation and learning achievement.

#### AUTHORS' CONTRIBUTIONS

Rohmat Nurhadi and lecturer Setyo Eko Admojo both came up with the idea of classroom action research. Rohmat analysed the problems that occurred in the classroom and created the background. Setyo Eko Admojo contributed to the methods used in the study. Both author analysed the work done. Then they discuss the results and conclusions of the research.

#### ACKNOWLEDGMENTS

The author would like to thank the teacher and staff at 1 Sewon Primary School for their useful suggestions and for creating a pleasant research environment. The author would also like to thank all the students of 1 Sewon Elementary School for helping to carry out this research.

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