**TALKING STICK** : A LEARNING MODEL TO IMPROVE STUDENT'S MATHEMATICS LEARNING INTEREST AND ACHIEVEMENT IN ELEMENTARY SCHOOLS

Rika Wulandari 1*

1* Primary Teacher Education, Univerity of Trunojoyo Madura, Bangkalan, Indonesia

rika.wulandari@trunojoyo.ac.id, http://orcid.org/0000-0002-0625-6395

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**Abstract**

The purpose of this study was to determine how the steps of the talking stick type of cooperative learning model assisted with question cards that can improve student learning outcomes and interest. The research was conducted using this type of classroom action research. The stages of classroom action research carried out include: plan, act, observe, reflect. The research was conducted at SDN Kara I, Sampang to 9 Grade III students. The results of the study indicate that the steps of the talking stick type of cooperative learning model assisted with question cards that can improve learning outcomes and student interest are: the teacher organizes students into several groups, each group consisting of four students heterogeneously. The teacher explains the rules of the game, namely the game is done by running a stick while singing, if the teacher says "stop" then the last one holding the stick gets a question by taking a question card containing the question, but if the student cannot answer it can be helped by a group of friends. Likewise so on ". After finishing the teacher asks students to conclude the material that has been studied then divides the evaluation questions. The percentage of classical completeness of learning outcomes reached 77.77% with an average learning outcome also increased from 66.1 to 77.77. Likewise with students' interest in learning, on average the results of filling out the interest questionnaire were in the category of very fond of the cooperative learning model type talking stick assisted question card that was done.

**Keywords** – Cooperative Learning, Talking Stick, Student Achievement and Interest.
1. Introduction

The success of the learning process is influenced by many factors. One of them is student interest in learning, student motivation, adequate facilities and a conducive environment. This is very influential on the success of the student learning process at school. However, teachers and students are also the most important factors in the success of the student learning process. For the success of the student learning process, the teacher should not just teach in class, the teacher must also see what problems are being faced by students so that teachers can immediately solve these problems. The problems faced by students in elementary schools vary, including the lack of student interest in learning. The results of observations at SDN Kara 1 Sampang show that students in grade III tend to be passive and when the teacher teaches, most of them have activities outside of learning such as playing, chatting, joking, etc. Student learning outcomes also still have not reached classical completeness, which is only 44.4%. Therefore, researchers want to increase the interest and learning outcomes of third grade students at SDN Kara 1 through cooperative learning model of talking stick type.

Lack of student interest in learning will be an obstacle to the success of the learning process in class. That way, the problem must be resolved immediately. According to Kartika (2014: 28) interest in learning can be interpreted as an interest in learning / paying attention to a particular lesson and accompanied by a desire to know, study, and prove it through active participation in learning activities. Without high student interest in learning, the learning process cannot run well and the learning objectives will not be achieved as desired. Therefore, a teacher must plan fun learning so that student interest in learning increases. One alternative that can be used to increase students' interest in learning mathematics is by using the talking stick type cooperative learning model assisted by the flat shape characteristics of card media. The talking stick type of cooperative learning model is a learning model that uses groups where the teacher uses the stick as a medium to encourage students to be brave in expressing opinions and fostering student self-confidence. Suprijono (2015: 128) adds that the talking stick type of cooperative learning model is learning that encourages students to have the courage to express their opinions. Researchers use these models and learning media because the talking stick type of cooperative learning model can encourage students to be active in class and want to provoke a great sense of student curiosity about something new through the use of card media with the characteristics of flat shapes. Students feel happy and excited if they find new things that they have never known from previous learning.

According to Uno (2014: 124) states that there are steps in cooperative learning type talking stick as follows: a. The teacher prepares a stick, b. The teacher conveys the main material to be studied, then provides the opportunity for students to read and study the material on the handle / package. c. After finishing reading the book and studying it, students are welcome to close the book, d. The teacher takes the stick and gives it to the students, after which the teacher asks the question and the student who holds the stick must answer it. And so on until most students get a part to answer each
question from the teacher. Meanwhile, according to Suprijono (2009: 109-110) states that the steps in cooperative learning type talking stick include: a. The teacher forms groups of 4 people, b. The teacher prepares a stick that is 20 cm long, the teacher delivers the main material to be studied, then gives the groups the opportunity to read and study the subject matter, d. Students discuss discussing the problems contained in the discourse. e. After the group has finished reading the subject matter and studying its content, the teacher invites group members to close the reading content. f. The teacher takes a stick and gives it to one of the group members, after which the teacher gives a question and the group member who holds the stick must answer it, and so on until most of the students get a part to answer each question from the teacher, g. Other students may help answer questions if their group members cannot answer the questions.

2. Method

The research was conducted at SDN Kara 1, Torjun District, Sampang Regency. The research subjects were students of class III SDN Kara 1, Torjun District, Sampang Regency. This research uses a type of classroom action research with the stages of each cycle: plan, act, observe, and reflect as shown in Figure 1 below.

![Figure 1. The Cycle of Classroom Action Research](image)

The following is a description of Cycle 1:

a) Plan

(1) Making a Learning Implementation Plan (RPP) using the talking stick learning model and card media. (2) Prepare worksheets for
Mathematics materials, (3) Prepare research sheets, (4) Prepare media cards and sticks to apply the talking stick model

b) Execution of Actions

   (1) The teacher prepares a stick, (2) The teacher prepares the main material to be studied and gives students the opportunity to read and study the material, (3) The teacher shows the stick and gives it to the students, (4) The student asks to run the stick while singing together- the same and students who hold the stick are asked questions by the teacher, (5) Evaluation

c) Observation

   Observations were made at the same time as the researcher carried out the action to determine the results and students' interest in learning by using the talking stick learning model assisted by card media

d) Reflection.

   At this stage an analysis of the learning process and results is carried out. Have you reached the success criteria or not. If from the results of the learning activities carried out by the teacher in cycle I the criteria for success have been achieved, the cycle is stopped, but if it is still not, it must be studied what are the inhibiting factors / constraints that occur during the learning process so that the objectives have not been achieved as expected, then an improvement plan is drawn up. in Cycle II, etc. The instruments used for data collection included: learning outcomes tests, interest questionnaires, observation sheets on the implementation of the talking stick type cooperative model assisted with question cards, and interview guides. Data analysis to be used is the flow model proposed by Miles and Huberman (1992: 18) which includes activities (1) reducing data, (2) presenting data, and (3) drawing conclusions and verification7. The success criteria in this study were determined based on the student's mathematics learning outcomes, the material characteristics of flat shapes and student's interest in learning.

3. Result and Discussion

Data Exposure of Cycle 1

   Cycle I was conducted in one meeting with a time allocation of 1 x 35 minutes. The material to be taught is the characteristics of flat shapes in class III semester II. In cycle I, there are several stages, namely the planning, action, observation, and reflection stages. At each stage in cycle I will be described as follows.
1. Plan

At this stage the teacher or researcher plans the activities that will be carried out during cycle I. The things that the teacher or researcher prepare are as follows:

a. Identifying the problem then planning what solutions are appropriate to overcome the problems that are being faced by students.

b. Designing a Learning Implementation Plan (RPP) about the properties of a flat shape using the Talking Stick Type Cooperative model.

c. Create and prepare the media that will be used for the action stage. The media that the teacher or researcher will use is the card media with the characteristics of flat shapes.

d. Make teacher and student observation sheets during the learning process.

2. Act

At the stage of implementing the action, the activities carried out are in accordance with the RPP that has been previously made by the researcher. The brief explanation of the activities carried out during the implementation stage of the action is as follows:

*Initial activity*

At this stage, activities start from preliminary activities. The researcher started from saying the opening greeting and then continued by asking how the students were doing and asking the class leader to lead the prayer. Next, attend the students by asking "the children, try to pay attention to your right hand, are there any of your friends who are not coming today?". After the absence, the teacher / researcher continued to motivate the students by inviting them to sing. together, the teacher / researcher conveys the learning objectives to be studied. The next activity carried out by the researcher was conducting apperception activities to students.

*Core activities*

The teacher forms groups of 4 people, the teacher prepares a stick that is 20 cm long. In the main activity the researcher organizes the students into several groups, each group consisting of four students heterogeneously. Researchers prepare sticks for learning activities while explaining material about the properties of flat shapes and exemplifying drawing flat shapes based on their properties. Then the researcher / teacher asked the students to read and review the material that the researcher had explained, then the researcher asked the students to draw a flat shape on a grid book that the researcher had prepared. The researcher instructed the students to discuss with their group friends to discuss the problems contained in the subject, then the researcher gave the students the opportunity to ask questions if something was not understood. After discussing the research, the researcher asked the students to close the reading
book. Furthermore, the researcher asked the students to play while learning to use a stick, the researcher took a stick and gave it to one of the students. The researcher / teacher explains the rules of the game "the game is played by running a stick while singing, later if the researcher says" stop "then the last person holding the stick gets a question by taking a question card containing the question, but if the student cannot answer it can be helped by a group of friends. Likewise so on ". After completing the researcher asked students to conclude the material that had been studied then divided the evaluation questions. Researchers guide students to work on evaluation questions. After completion, the researcher asks students to collect their work.

Closing Activities

Researchers provide reinforcement to students from the explanations that have been explained during the teaching and learning process. Then the researcher revived the students' enthusiasm by singing the song "wake up flat" together. The teacher / researcher gives an overview of the learning activities for the next meeting and then continues with the teacher / researcher asking the class leader to lead a prayer to end the lesson and then the teacher / researcher says the closing greeting .Student Achievement in Mathematics Using a Cooperative Model Type Talking Stick assisted by Media Cards.

The learning process using cooperative learning model talking stick type assisted by card media conducted by researchers in the first cycle increased student learning outcomes. This increase can be seen by an increase in the percentage of student learning completeness. Student learning outcomes before being given the action (pre test) were less than half of the total number of students who completed but after being given action in cycle I by researchers student learning outcomes increased even only a few students did not complete or their scores were still below KKM. The improvement of student learning outcomes from daily tests to evaluation tests in cycle I will be presented in the following table:

<table>
<thead>
<tr>
<th>No</th>
<th>Initial Name</th>
<th>Pretest Score</th>
<th>Category</th>
<th>Post Test Score</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ABA</td>
<td>50</td>
<td>Not Completed</td>
<td>85</td>
<td>Completed</td>
</tr>
<tr>
<td>2</td>
<td>ABR</td>
<td>65</td>
<td>Not Completed</td>
<td>80</td>
<td>Completed</td>
</tr>
<tr>
<td>3</td>
<td>ALF</td>
<td>70</td>
<td>Completed</td>
<td>70</td>
<td>Completed</td>
</tr>
<tr>
<td>4</td>
<td>BDS</td>
<td>40</td>
<td>Not Completed</td>
<td>65</td>
<td>Not Completed</td>
</tr>
<tr>
<td>5</td>
<td>LZS</td>
<td>85</td>
<td>Completed</td>
<td>90</td>
<td>Completed</td>
</tr>
<tr>
<td>6</td>
<td>MLI</td>
<td>60</td>
<td>Not Completed</td>
<td>60</td>
<td>Not Completed</td>
</tr>
<tr>
<td>7</td>
<td>MMU</td>
<td>75</td>
<td>Completed</td>
<td>80</td>
<td>Completed</td>
</tr>
<tr>
<td>8</td>
<td>RSM</td>
<td>90</td>
<td>Completed</td>
<td>85</td>
<td>Completed</td>
</tr>
<tr>
<td>9</td>
<td>RDJ</td>
<td>60</td>
<td>Not Completed</td>
<td>85</td>
<td>Completed</td>
</tr>
</tbody>
</table>
From Table 1 above, it can be seen that there is an increase in the number of students who completed after receiving treatment in the form of learning with the talking stick cooperative model compared to the previous one with a classical completeness percentage of 77.77%.

### Table 2. The Comparison Of Mean Pretest and Posttest

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRE TEST</strong></td>
<td>9</td>
<td>40,00</td>
<td>90,00</td>
<td>66,1111</td>
<td>15,96437</td>
</tr>
<tr>
<td><strong>POST TEST</strong></td>
<td>9</td>
<td>60,00</td>
<td>90,00</td>
<td>77,7778</td>
<td>10,34139</td>
</tr>
<tr>
<td><strong>Valid N (listwise)</strong></td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 2 above, it can also be seen that there is an increase in the average score of student learning outcomes. The minimum score of the post test has also increased. From the results of student learning after learning with the talking stick cooperative model compared to the previous one (See Table 1 and Table 2), it was found that student learning outcomes had reached the specified success criteria, namely a minimum classical completeness of 75%. The analysis was continued by looking at the results of the assessment of students’ interest in learning the properties of flat shapes using the talking stick type cooperative model.

**Results of Increasing Student Interest in Learning**

After learning using the Talking Stick cooperative learning model assisted with the characteristics of the flat shape card media, the students' interest in learning questionnaires were distributed. Students are asked a questionnaire that has been provided by the researcher. The questionnaire given is different from the questionnaire given to students before taking the action stage. This questionnaire contains about whether the actions taken by researchers using the Talking Stick Type Cooperative learning model assisted by card media the characteristics of flat shapes can increase students' interest in learning mathematics. Based on the results of filling out the questionnaire on student learning interest in cycle I, it was found that there was an increase in student interest in learning compared to previous learning. It is proven that the test results show that the average of all the questions is in the "Very Like" category. Therefore, it can be concluded that by using the Talking Stick type of cooperative learning model assisted by card media the properties of flat shapes student interest in mathematics can increase according to the success criteria and the cycle stops.

**4. Conclusion**

Based on the results of the study, it is known that the steps of the cooperative learning model talking stick type assisted by question cards that can improve student learning outcomes and interest include: the teacher organizes students into several groups, each group consists of four students heterogeneously. The teacher prepares
sticks for learning activities while explaining the material about the properties of flat shapes and giving examples of drawing flat shapes based on their properties. The teacher asks students to read and review the material that has been explained and discuss. After discussing the teacher asks students to close the material book. Furthermore, the teacher invites students to play while learning to use sticks, the teacher takes a stick and gives it to one of the students. The teacher explains the rules of the game, namely the game is done by running a stick while singing, if the teacher says "stop" then the last one holding the stick gets a question by taking a question card containing the question, but if the student cannot answer it can be helped by a group of friends. Likewise so on ". After finishing the teacher asks students to conclude the material that has been studied then distributes evaluation questions.

References


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