

Improving Student Interests and Learning Outcomes With the Jigsaw Type Cooperative Learning Model Approach in Al Madinah Elementary School Students, Jember

Darsan

Universitas PGRI Argopuro Jember-Indonesia

E-mail: dr.darsanafidar@gmail.com

Abstract:

The teacher has the responsibility to determine the success of teaching and learning in schools. In addition, the learning process in the classroom requires the application of learning models so that learning becomes more interesting for students. One of them is by using a jigsaw, with the aim of increasing student interest and learning outcomes. This research is a class action research (CAR). Data collection techniques were carried out using documentation, observation, interviews, questionnaires, and test methods. The results of this study indicate the application of the jigsaw cooperative learning model in practice there are 7 steps, namely, forming heterogeneous groups consisting of ± 4 people, each member in the group is given a different subtopic, forming expert groups, expert group discussions, distributing expert groups, explaining the material to the original group, presenting the results of the discussion and finally closing. The application of this type of jigsaw cooperative learning model can increase student interest and learning outcomes. This can be seen from the percentage of interest in cycle I of 64.0% and in cycle II of 84.3%. Whereas the percentage of learning outcomes in cycle I and cycle II increased by 22.2%, namely in cycle I by 61.1%, increased in cycle II to 83.3%, the results of the data were obtained from filling out the test questions.

Keywords: Learning Interest, Learning Outcomes, Jigsaw Cooperative Type



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INTRODUCTION

Students consider learning mathematics to be an unpleasant activity, sitting for hours listening to an explanation of a subject delivered by the teacher. This activity is felt by students as a burden on the mind in studying. This is what causes students to be lazy to carry out activities in mathematics learning activities in class. Therefore the teacher's role is very important to achieve learning goals and competency demands that must be achieved by students. (Mawaddah, Suyitno, & Kartono, 2015; Utomo, Wahyuni, & Hariyadi, 2014)

Teachers are responsible for determining the success of teaching and learning activities in schools. This is reinforced by the statement (Annisa, Effendi, & Damris, 2019) which states "it is in the hands of the teacher that learning outcomes are more determined".

Teaching and learning activities are said to be successful, one of which is if the teacher can develop and improve student learning outcomes.(Annisa, Effendi, & Damris, 2019)

If student learning outcomes in a teaching and learning activity can develop properly then the goals of the teaching and learning process will be achieved, because basically a teaching and learning activity is carried out to increase students' daily scores. Judging from the results of the tests that the researchers got from teachers in the field of mathematics studies, it turned out that the students' test scores were still low. (Annisa et al., 2019; Hanif, Ibrohim, & Rohman, 2016)

Out of a total of 18 students, only 38.9% met the KKM standard where the other 61.1% still scored below the school's KKM standard of 75. Therefore the interest of students must be increased so that the KKM standard is achieved. Affixing student learning interest is very important and the role of the teacher also supports the growth of student interest, because with high interest in learning, learning outcomes will be better. (Aisah, 2020; Nurhayati, Robandi, & Mulyasari, 2018)

The jigsaw type cooperative learning model has the advantage of "equal mastery of the material can be achieved in a shorter time and can train students to be more active in speaking and arguing" (Silver, Harvey L., Strong, R.W., & Perini, 2007). So by applying the jigsaw type cooperative learning model students can be responsible and more active in the learning process so as to increase student enthusiasm for learning to get better results. The syntax of the jigsaw cooperative learning model is: students are divided into heterogeneous study groups. Each student is given a different problem assignment, then with the same problem students are gathered into experts to find information related to the problem assigned, experts meet to discuss the same problem and share knowledge to improve the presentation concept, experts explain the results of the discussion to members his team (group of origin) and presented the results of the discussion.(Adi Kesuma, Yoda, & Hidayat, 2021; Aeni, Arianto, & Santoso, 2017)

Based on the description above, the following problems can be formulated: how to apply the jigsaw type cooperative learning model for class V Al Madinah Jember Elementary School, how to increase interest and learning outcomes for class V Al Madinah Jember students after applying the jigsaw type cooperative learning model.

Based on the formulation of the problem above, the objectives to be achieved in this study are: to describe the application of the jigsaw type cooperative learning model for class V Al Madinah Elementary School Jember, to describe the increased interest and learning outcomes of fifth grade students at Al Madinah Elementary School Jember after the learning model is applied jigsaw type cooperative.

METHOD

The type of research used in this research is classroom action research (CAR) with a qualitative approach. The subjects in this study were fifth grade elementary school students for the 2022/2023 academic year. With a total of 18 students consisting of 6 male students and 12 female students. The class was determined by the school, in this

case the fifth grade math teacher on the grounds that students experienced learning difficulties and their learning outcomes were still not optimal.

This study uses data collection including questionnaires, tests, observations, interviews

$$\frac{Skor\ total}{Skor\ ideal} \times 100\%$$

and documentation 1). Analysis of student interest questionnaire data was obtained by calculating the average questionnaire answers that had been filled out by students. By dividing the scores obtained from all respondents with the scores obtained from all items then multiplied by 100%. In this case using the formula from (Sugiyono, 2014) Percentage of class interest =

So from the statement above, the action can be said to be successful if the score of students' interest in learning with success is at a good or very good level. 2). Analysis of the results of the data used to find out student learning outcomes observed the scores obtained by students at the end of the cycle. (Arikunto, 2011) states that "the formula used in analyzing student learning outcomes classically is:

$$P = \frac{N}{SN} \times 100\%$$

Information:

The completeness criteria for individual learning outcomes in this study were adjusted to the KKM scores applied at Al Madinah Elementary School Jember. If the percentage of classical learning completeness has reached 75%, then the class is declared to have completed learning. 3). For teacher and student activity researchers used the formula from (Arikunto, 2011), namely:

Information :

$$P = \frac{\sum skor\ perolehan}{\sum skor\ total} \times 100\%$$

P = success rate Teacher and student activities are declared successful if the percentage of observations obtained by teachers and students reaches 61% with a good or very good success rate.

RESULTS

This research was carried out in two cycles, where each cycle consisted of 3 meetings. Students' scores before the action was carried out were only 7 students or 38.8% who met the KKM standard where 11 or 61.1% of the others still scored below the KKM, namely 75. Questionnaire sheets of student interest in learning were given before the research was carried out. The percentage of students' interest in learning classically completing the questionnaire reached 32.7% with the criteria for the level of interest in learning is still in the less category.

Student activity at cycle I meetings seemed to be less than optimal, this can be seen from the lack of enthusiasm of students in the learning process, busy, joking with their friends and some disturbing other groups. Based on the results of observations of student activity, it still reaches a sufficient level of success. While the teacher's activity at the first

cycle meeting has shown a good level of success. But the teacher's activity when guiding students into expert groups needs to be increased again because the teacher guides students into expert groups with less than the maximum, and the teacher's voice that is not loud makes it difficult to condition busy students.

Based on the results of the analysis of the test questions that were carried out at the last meeting, there was an increase in student learning outcomes in cycle I, from 38.9% of students who completed their studies to 61.1% of students who completed their studies. However, this still cannot be said to be complete because it has not met the indicators of success. Meanwhile, students' interest in learning, which was initially 32.7%, became 64.0% with a "good" level of success.

The teacher (researcher) evaluates the mathematics learning process in cycle I which has been completed with the aim of finding out what needs to be improved. Based on the interests and learning outcomes, it cannot be said to be complete. Therefore, the improvements made by the teacher are to amplify the sound when teaching so that students do not tend to be crowded, dividing students into several heterogeneous origin groups and expert groups consisting of 3 to 6 people based on the results of tests conducted in cycle I, maximizing the provision of guidance in each group and asking students to be more orderly in carrying out group discussions so that each individual understands the material being discussed, students are also asked to study advanced material which will be explained in the next meeting.

Student activities at cycle II meetings were going well, there was an increase in student enthusiasm in participating in the learning process in cycle II, students were also more active in expressing opinions, asking questions, and answering questions, students were also not busy during the learning process. So that student activity experienced an increase, initially in the first cycle the observation of student activity obtained a sufficient level of success, but the results of observing student activity in cycle II had reached a good level of success. Meanwhile, teacher activity in cycle II obtained a very good level of success.

While the results of the analysis of the test questions that were carried out at the last meeting of cycle II showed an increase in learning outcomes from initially in cycle I students completed 11 or 61.1% to 15 or 83.3% of students who completed learning. This has reached the classical completeness criteria set by the school, namely 75% of the number of students who have achieved grades

75. While the results of filling in the interest in learning questionnaire in cycle I which was carried out at the end of the meeting showed an increase in student interest in learning from 64.0% in cycle I to 84.3%. Thus filling out the student interest in learning questionnaire has fulfilled the indicator of success, namely achieving a very good level of success.

Based on the results of the second cycle of research, most students have played an active role in the process of learning mathematics, the percentage of student learning outcomes has increased and the percentage of students' learning interest has also increased

classically. Thus cycle II was declared successful in achieving classical learning outcomes and student learning interest had met the indicators of success, so the cycle was stopped.

Filling in the student interest in learning questionnaire was obtained before the action was carried out and after the action was carried out, before the action was carried out the results of the questionnaire percentage of student learning interest were 32.7% included in the less criteria, but after the action the percentage of interest in learning increased both in cycle I and in cycle II . The percentage of the results of filling out the questionnaire of students' learning interest in cycle I reached 64.0% with good criteria, then the percentage of filling out the questionnaire in cycle II reached 84.3% with very good criteria. With these results filling in students' interest in learning has met the indicators of success, namely achieving a very good classical level of success

DISCUSSION

states that there are expert groups and home groups in the jigsaw type cooperative learning model who are assigned to explore certain topics then explained to members of the home group. This is in accordance with the actions taken by the researcher that during the implementation of the jigsaw type cooperative learning students were formed from a home group consisting of 3 people and an expert group consisting of 6 people was formed.(Silver, Harvey L., Strong, R.W., & Perini, 2007)

From the data from the observation of the teacher in the field of study of the teacher during the teaching and learning process, it was obtained information that the teacher gave lessons correctly and systematically in accordance with the lesson plans that had been made and in accordance with the steps for learning jigsaw according to (Adi Kesuma et al., 2021) including grouping students consisting of ± 4 people, each person in the team is given different material and assignments, Members from different teams with the same assignment form a new group (expert group), After the expert group discusses, each member returns to the original group and explains to the members groups about the sub-topics they mastered, each team of experts presented the results of the discussion and closing.

The percentage of teacher activity in implementing jigsaw cooperative learning in the first cycle was 70% included in the good category, while in the second cycle 85% was included in the very good category. And the results of the analysis of student activity in cycle I and cycle II can be concluded that student activity has increased 14.4% and based on observations, student activity in cycle I reaches 50.6% with a sufficient level of success while student activity in cycle II has reached 65 .0% with a good success rate.

Increased understanding is obtained by students themselves through student experiences during group discussions, group members are also responsible for the success of their groups, students also have the opportunity to express opinions, and process the information obtained so that students are more confident in communicating an understanding or difficulty so that it makes it easier they understand the material being taught. This is reinforced by (Shoimin, 2014) which states that students who are involved in this type of jigsaw cooperative learning get better achievements, have better attitudes,

and are more positive towards learning, and respect each other's differences and opinions.

(Karacop, 2017) conducted research on cooperative learning with the jigsaw model, the results of which show that cooperative interaction has a variety of positive effects, including increasing interest and learning outcomes. The results showed that the use of the jigsaw cooperative learning model can increase student interest and learning outcomes in the two-variable system of linear equations subject. This increase in learning interest can be seen from the average percentage of class interest, which is 37.7% before the action is carried out with the criteria for a low level of success, but after the action is carried out the percentage of interest (Muis & Priawasana, 2022; Nurhayati et al., 2018) learn experienced an increase in both cycle I and cycle II. The percentage of the results of filling out the questionnaire in the first cycle reached 64.0% with a good level of success criteria, then the percentage of completing the questionnaire in the second cycle reached 84.3% with very good success criteria.

At the end of each meeting in each cycle a learning achievement test was held. The increase in student learning outcomes test scores can be seen from the average percentage of learning outcomes, which is 38.9% before the action is taken, and after the action is carried out in cycle I, the percentage of student learning outcomes has increased to 61.1%, but this still cannot be said. complete, so it is necessary to carry out the cycle II. This is because in the first cycle of student learning outcomes have not obtained classical completeness of 75%. While in cycle II the classical completeness was obtained at 83.3%. The learning outcomes have fulfilled classical completeness, namely 83.3% of students have achieved a score of 75.

Based on the data analysis, it can be seen that learning mathematics with the application of the jigsaw type cooperative learning model in addition to increasing interest in learning can also improve learning outcomes for class V Al Madinah Elementary School Students, Jember.

Interest is the most important basis in the success of the learning process. If students feel happy in learning, then they will quickly understand and understand the material provided by the teacher. Because interest is a fixed tendency to pay attention and carry out several activities (Volkova & Rusalov, 2016). If the activities that a student is interested in will be paid attention to continuously accompanied by feelings of pleasure, then he can develop an interest in something that basically helps students see how the material is expected to be learned by himself (individual). This process shows students how knowledge of certain skills affects him, serves his goals, and satisfies his needs.

Mina has a huge influence on learning, because if the learning material being studied is not in accordance with students' interests, then they will not study as well (Nurhayati et al., 2018). Therefore, interest in learning also determines the learning process can run well and conducive. By creating a conducive teaching and learning atmosphere, students will be motivated to take lessons with high learning outcomes (Widodo, 2015) in educational psychology it is stated that, the absence of a child's interest in a subject will

result in learning difficulties. Learning that is not accompanied by interest may not be in accordance with talents, not in accordance with needs, not in accordance with skills and not in accordance with the special types of children who cause problems in themselves

CONCLUSION

Based on the results and discussion, it can be concluded that, the application of the jigsaw type cooperative learning model in its implementation there are 7 steps, namely: forming heterogeneous groups, giving different assignments to each group, the same task forming new groups (expert groups), expert group discussions, then return to the foreign groups, then explain the material to their group mates, presentation and finally closing. The application of this type of jigsaw cooperative learning model can increase student interest and learning outcomes. This can be seen from the percentage of interest in cycle I of 64.0%, which increased in cycle II to 84.3%, the increase in interest in learning reached 20.3%, the results of the data were obtained from filling out the questionnaire. Whereas the percentage of learning outcomes in cycle I and cycle II increased by 22.2%, namely in cycle I by 61.1%, increased in cycle II to 83.3%, the results of the data were obtained from filling out the test questions. This shows that by using the Jigsaw Cooperative learning model on the subject of the Two-Variable Linear Equation System (SPLDV) in class V Al Madinah Elementary School, Jember, student interest and learning outcomes increase.

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