

THE APPLICATION OF TYPE JIGSAW COOPERATIVE LEARNING MODEL IN IMPROVING LEARNING OUTCOMENS IN JUNIOR HIGH SCHOOL MEDAN

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Abstract: The activity to be achieved in this research is to improve learning outcomes by implementing jigsaw cooperative learning. This study applied classroom action research consisting of two cycles with qualitative and quantitative data analysis techniques. The subjects in this study were 28 students of class VIII Hasanuddin Medan Semester 1 Private Junior High School. In the pre-test activities before the learning model was found, only 4 students or 14, 28% of them have passed the revenge and PAI subjects, while 24 students or 85.71% were declared unfinished. The learning model was applied, then in the first cycle it could be seen that 15 students or 53.57% could be declared complete or experienced an increased, while 13 students or 46.42% were declared incomplete. Cycle II applied from the results of the post-test II could be seen that 24 students or 85.71% could be declared complete or increased, while 4 students or 14.28% were declared incomplete. Thus, using a jigsaw cooperative type strategy produced learning in cycle one to cycle two by using the learning model has experienced a significant increase - + 30%, so students had maximum marks. The results showed that the application of a jigsaw cooperative model could be considered as one way to improve student learning outcomes.

Keyword: Cooperative learning, student learning outcomes.

INTRODUCTION

The Quran is the word of Almighty God Allah Subhana wa Ta'ala neatly arranged Religious education is an integrated part that is contained in the education curriculum and is attached to each subject part of value education. Therefore religious values will always provide a style for national education.¹ According to law no. 20 of 2003 concerning the national education system article 1 paragraph 1 states that: education is a conscious and planned effort to create an atmosphere of learning and learning processes so that students actively develop their potential to have religious-spiritual strength, self-control, personality, intelligence, noble character, as well as the skills needed by himself, society, nation, and state.

To get satisfactory results on student learning outcomes, it is necessary to replace the instructional model that is so that students are not monotonous in carrying out learning process activities, such as only taking notes and listening to the teacher only when

¹ Hasbullah, *Dasar-dasar Ilmu Pendidikan*, (Jakarta:PT Raja Grafindo Persada, 2009), p. 182.

the teacher conveys the lesson. From the results of research in Medan Hasanuddin Sewasta Junior High School, the opinions of 28 students who noticed the teacher explained the lesson was only 4 or 5 students who understood. So the learning outcomes are very low.

The learning model that will be applied is a jigsaw cooperative learning model, which can develop the quality of students' self and students can do it together. Learning in small groups with the principle of cooperative jigsaw type is very well used to achieve learning goals and satisfying results. The learning process is a process of interaction between students and the teacher as a teacher, the learning process is carried out using a pedagogic that includes teaching strategies and methods. The learning success of students achieved can be measured through the assessment of learning outcomes. One teaching method is: "Cooperative learning (cooperative learning) which requires a teaching approach through the use of small groups of students to work together in maximizing learning conditions in achieving learning goals.

The learning atmosphere takes place in an interaction that is trusting, open and provides opportunities for students to obtain and provide input between them to develop the knowledge, attitudes, values, and morals, as well as the skills that they want to develop. In general, patterns of interaction that are open and direct among group members are very important for students to gain success in learning.

Based on the description that the research has described in PAI learning by using a Jigsaw cooperative learning model, then the problem can be formulated as follows: "Can the Jigsaw type cooperative learning model improve student learning outcomes in class VIII at SMP Hasanuddin Hasanuddin Private Field"? and as for the purpose of this research is "To find out whether the type of jigsaw cooperative learning model can build the effectiveness of students in following the PAI learning process"?

THEORY

Islamic Education

Islamic religious education is a conscious and planned effort informing students or students to understand, recognize, believe, and live the teachings of Islamic religion, so too with the demand to respect other religious adherents in religious harmony so that the realization of national unity and unity can be realized.

Cooperative Learning

Cooperative learning is a group of teaching strategies that involve students working collaboratively to achieve shared goals (Eggen and Kauchak, 1996: 276).² Cooperative learning can be defined as a teaching approach where students work together with one another in small study groups to complete individual or group assignments given by the teacher.³ In other words, each student gets their group and discusses or examines the material provided by the teacher together.

Many definitions of experts regarding the notion of cooperative learning include: (a). Jhonson (1994), Cooperative Learning as a teaching method. This method is a learning process that involves students learning in small groups. (b). Salvin (1995), cooperative learning is a learning model where the system of learning and working in small groups of 4-6 people collaboratively to stimulate students to be more passionate about learning. (c). Jhonson (1994), cooperative learning is grouping students in class into a small group so that students can work together with the maximum ability that they have and learn from each other in the group.⁴

The definition above can be concluded that cooperative learning is group learning conducted by students to solve problems together.

Olsen and Kagan (1992) Say that cooperative learning offers three main provisions relating to: (a). It provides enrichment structure for student interaction. (b). Related to the main scope of learning and the need for discussion development in an organizational framework. (c). Increases opportunities for individuals to mention suggestions.⁵

Referring to this opinion, with cooperative learning students can make great progress towards developing attitudes, values, and behaviors that enable them to participate in their communities in ways that are compatible with the aims of historical education because the main purpose of cooperative learning is to gain knowledge from friends.

Jigsaw Type

The jigsaw was first developed and tested by Elliot Aronson and friends at Texas University in 1978 and was later adapted by Salvin and friends at Jhon Hopkins Arends University in 1994.⁶ Jigsaw according to the Indonesian English Dictionary is a jigsaw,

² Trianto, *Mendesain Pembelajaran Model progresif and Inovatif*, (Surabaya:, 2009), p. 58

³ Isjoni, *Pembelajaran Kooperatif Meningkatkan Kecerdasan Komunikasi Antara Peserta Didik*, (Yogyakarta: Pustaka Belajar, 2009), p. 20-21.

⁴ Isjoni, *Pembelajaran...*, p. 22-23.

⁵ Isjoni, *Pembelajaran...*, p. 22-23.

⁶ Trianto, *Mendesain...*, p. 73.

pattern pieces, puzzles arrange pieces of the picture.⁷ Then according to Siti Halimah Jigsaw is a regular group work strategy based on cooperation and responsibility.⁸

The jigsaw teaching technique was developed by Aronson as a Cooperative method. This technique can be used in teaching reading, writing, listening, or speaking.⁹ Jigsaw learning is a widely used technique that has similarities with the "exchange from group to group" technique with an important difference, each student teaches something.¹⁰

The steps in applying the jigsaw technique according to Siti Halimah are as follows: (a). Classes are organized into several "base" groups with about six members each. (b). The task is divided into the same number of sections with different topics. (c). Within each base group, each student examines one of the different issues or statements. (d). The group assigns specific tasks to base group members or lets the group negotiate among themselves about who will do what. (e). What are the conclusions from each of the reading topics, after finishing¹¹ researching and reading them. Then students are told to decipher or read.

The formula states the following types of jigsaw cooperative learning steps: (a). Students are grouped with 4 members. (b). Each person on the team is given different material and assignments, (c). Members from different teams with the same mastery form a new group (Expert Group). (d). After the expert group discusses, each member returns to the original group and explains to the group members about the sub-chapter they are in control of. (e). Each expert team presents the results of the discussion. (f). Discussion. (g). Closing.

While according to Anita Lie the steps in jigsaw learning are: (a). Teaching divides the learning material to be given into four parts, (b). Before the lesson material is given, teaching provides an introduction to the topic that will be discussed in the lesson material for the day. Teaching can write topics on the board and show what students know about the topic. These brainstorming activities are included to activate students' schemata to be better prepared for new learning material. (c). Students are divided into groups of four. (d). The first part of the material is given to the first student, while the second student receives the second part, and so on. (e). then students are told to read/work on their respective parts. (f). After finishing, students share with each other what they have read/worked on.

⁷ Jhon M. Echols dan Hassan Shadily, *Inggris-Indonesia, Indonesia- English Dictionary*, Cet. 27, (Jakarta: Gramedia Pustaka Utama, 2003), p. 336.

⁸ Siti Halimah, *Strategi Pembelajaran*, (Medan: Cita Pustaka, 2007), p. 11.

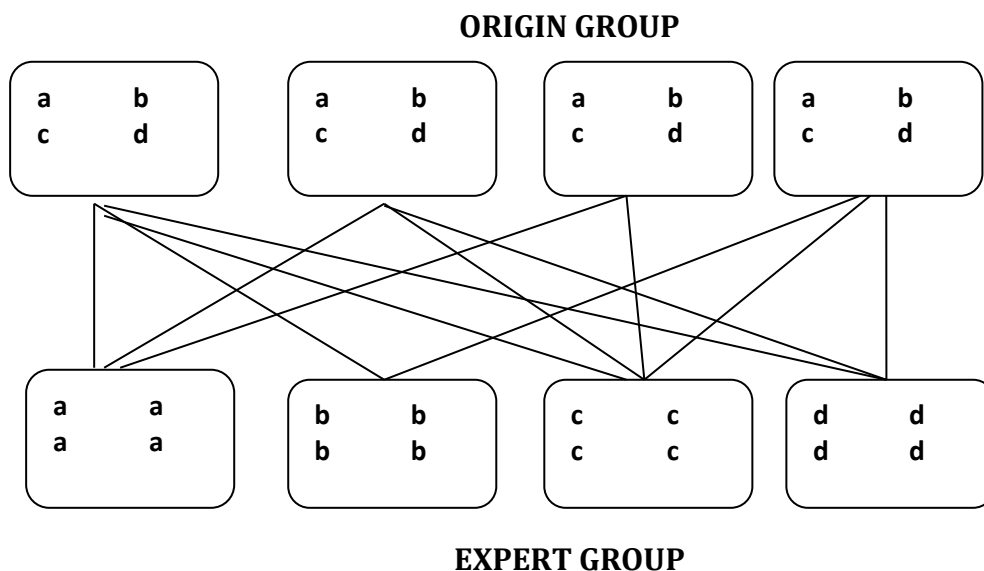
⁹ Anita Lie, *Cooperative Learning*, (Jakarta: PT. Gramedia Widiasaran Indonesia, 2002), p. 69.

¹⁰ Silberman Mel, *Active Learning 101 Pembelajaran Akif*. (Jakarta: 2009), p. 51

¹¹ Siti Halimah, *Strategi...*, p. 146-147.

In this activity, students can complement and interact with one another. (g). specifically for reading activities, then the teacher distributes the unread part of the certificate to each student. Students read the passage. (h). This activity can end with a discussion on the topic in the day's learning material. Discussions can be held between pairs or with the whole class.

Furthermore, according to Nang Hanafiah The steps that can be taken in this jigsaw learning model are as follows: (a). Students are grouped into 4 team members. (b). Each person on the team is given a different piece of material. (c). Everyone on the team is given the assigned material section. (d). Meet in new groups (expert groups) to discuss their sub-chapters. (e). After completion, the discussion as an expert team each member returns to the original group and alternately teaches their teammates about the sub-chapter they are mastering and each other member listens. (f). Each expert team presents the results of the discussion. (g). The teacher gives an evaluation, (h). Closing.¹²



METHODE

In this case, the research is categorized as Classroom Action Research (CAR). This research was carried out at Hasanuddin Junior High School Medan in semester 1. The subjects in this study were class VIII. The number of students is 28 people. With details of 15 men and while 13 women.

The object of this research is the cooperative learning model. Because cooperative learning is very broad. So in this study, the scope is limited specifically in the type of Jigsaw cooperative learning model and student learning outcomes. The type of data collected in this activity is student learning outcomes data. In the type of data collected, class VIII of

¹² Nanag Hanafiah, *Konsep Strategi Pembelajaran*, (Bandung: PT Refika Aditama, 2010), p. 44.

Hasanuddin Medan Junior High School, totaling 28 people, consisting of 13 women and 15 men.

The design of this study is classroom action research (CAR). In carrying out this activity two cycles are carried out. The first cycle has not fulfilled the criteria for success in learning. Therefore an improvement is made by carrying out the next cycle is the second cycle. The implementation of these activities can be described as follows:

Classroom Action Research Design

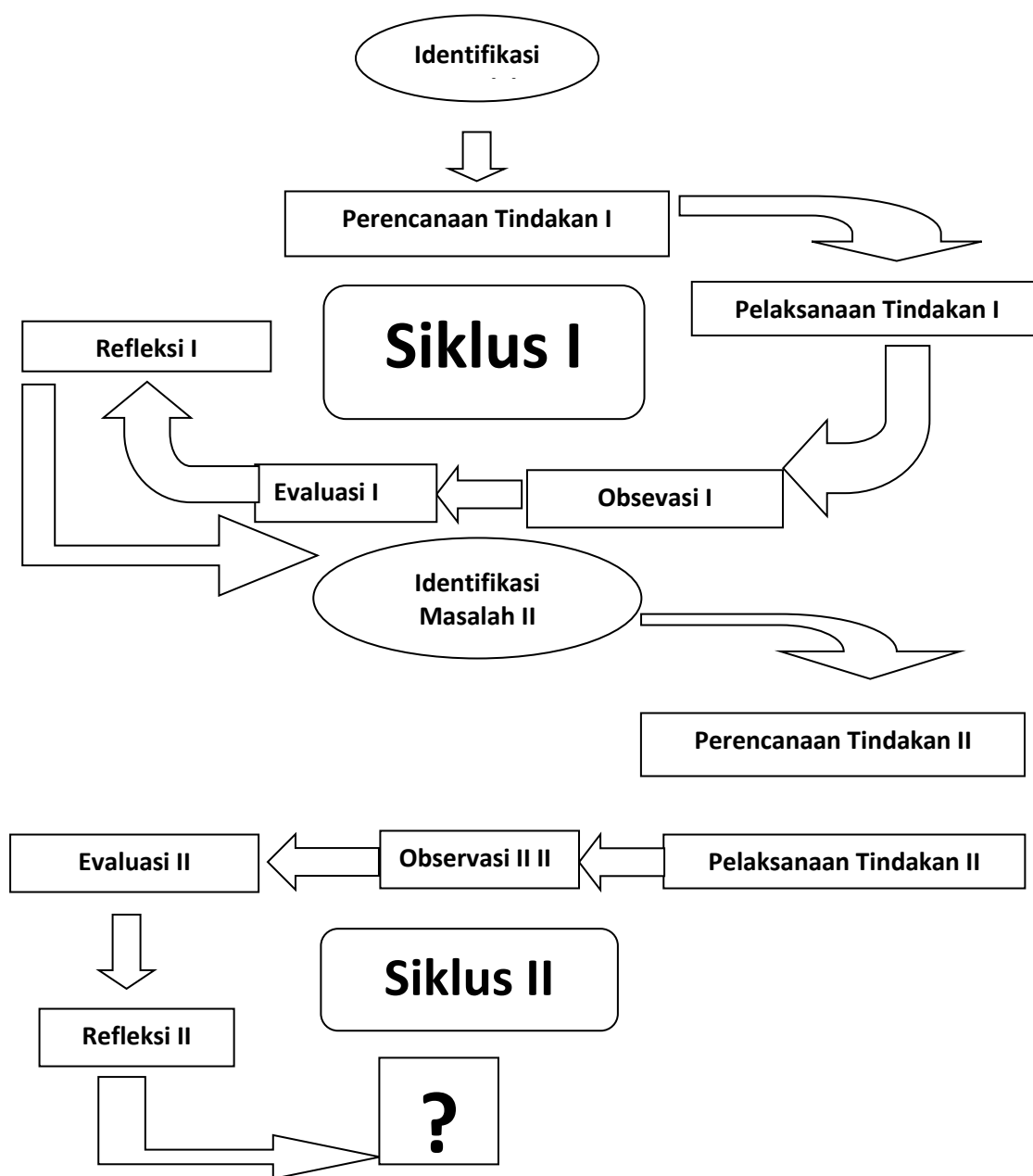


Figure 2: Classroom Action Research Design

1. Planning

At this stage, planning is done that is mature and systematic so that what is intended can be achieved in the research activities.

2. Action Implementation Stage

After the lesson planning has been carefully prepared, the action is taken. At this stage the action is carried out using a jigsaw cooperative learning model as it has been tightened before, where the researcher acts as a teacher.

3. Observation Stage

Observation on the process of Islamic Religious Education learning in the classroom to determine the suitability of the action with the plan that has been prepared and to find out the extent to which the implementation of the action can produce changes in accordance with the desired goals.

4. Reflection Stage

Reflection activities are carried out to consider the teaching guidelines that are carried out as well as to see the suitability achieved and desired in the ongoing learning process, for that reason a reflection is made on the weaknesses or lack of actions that have been implemented in the first cycle to be corrected.

This analysis was carried out using the percentage and quantity of Zainal Aqib data. This analysis is done by knowing the average value of students using the following formula

$$x = \frac{\sum X}{\sum N} \times 100\%$$

Information x : Average value

$\sum X$: Sum of All Student Grades

$\sum N$: Total Number of Students

And to calculate the percentage of mastery learning, use the following formula:¹³

$$p = \frac{\sum \text{students who have finished learning}}{\sum \text{siswa}} \times 100\%$$

According to Zainal Aqib, Siti Jayaroh, et al in his book Classroom Action Research. Data analysis was performed at the reflection stage. The results of this analysis are used as reflection material for further planning in the next cycle. The results of this reflection can also be used as material for reflection in improving learning designs or perhaps as a material for consideration in determining learning models.

¹³ Zainal Aqib, dkk., *Penelitian Tindakan Kelas*, (Bandung: Yrama Widya, 2009), p. 39-41

RESULTS

The first step before planning and taking action on students is the provision of initial tests. The purpose of conducting the initial test that is given to students before planning is to determine the student's initial ability to solve problems related to Dandan and Hypocrisy. From 28 students in class VIII Hasanuddin Private Junior High School Medan.

The result is that from the activities of the pre-test results found only 4 people were declared "Completed" or 14.28%, while 24 students were declared still "Not Completed" or 85.71%. In this pre-test, obtained an average student score of 47.85%. These results indicate that there are still many students experiencing learning difficulties, as evidenced by the level of completeness obtained by using the following formula.

$$P = \frac{f}{N} \times 100$$

Keterangan:

P = Percentage of Test Results

f = Number of Students Completed

N = Total Number of Students

$$P = \frac{4}{28} \times 100$$

$$= 14,28$$

Cycle I

Based on the post cycle I test, it can be seen that 15 students or 53.57% of students are "Completed" while 13 students or 46.42% of students are "Not Completed". In the first cycle, an average student score of 67.85% was obtained. So from the level of mastery obtained by individual students can be obtained classically completeness using the formula.

$$P = \frac{f}{N} \times 100$$

Keterangan:

P = Presentase Hasil Tes

f = Jumlah Siswa Yang Tuntas

N = Jumlah Keseluruhan Siswa

$$P = \frac{15}{28} \times 100$$

$$= 53,57\%$$

Cycle II

This second cycle action is the pace of the first cycle based on the researchers' reflection on the implementation using a jigsaw cooperative strategy. Then the results of the second cycle is the mastery learning in the second cycle there are 24 students "Complete" or 85.71%. While 4 students "Not Completed" or 14.28%. With the increase in learning outcomes, it is sufficient to meet classical completeness in accordance with the expectations of researchers.

Descriptions of Student Learning Outcomes Before and After Cycles

No.	Achievement of learning outcomes	Initial Test	Cycle I	Cycle II
1.	Number of Students Completed	4	13	24
2.	Average value	47,85%	67,85%	71,96%
3.	Percentage of completeness	14,28%	53,57%	85,71%

CONCLUSION

Based on the results of the analysis activities in the previous chapter, it can be concluded that the application of Jigsaw cooperative learning models in PAI subjects can improve student learning outcomes in class VIII of Hasanuddin Medan Junior High School. This can be proven by a significant increase in student learning outcomes after applying the Jigsaw cooperative learning model.

The suggestions that can be delivered from the results of this activity are as follows:

- It is recommended that all components of the school, especially for teachers, be able to improve teaching methods by using a variety of learning models. By using a Jigsaw cooperative learning model. then it can be used as a way to improve learning outcomes.
- It is recommended that all students of the Medan Hasanuddin Sewer Middle School be able to follow the course of the jigsaw cooperative learning model. Because in this finding can improve learning outcomes in PAI subjects.
- It is recommended that researchers be able to research more broadly and research on other subjects, in order to improve students' learning abilities and learning activities

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