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Application of the Group Investigation (GI) Cooperative Learning Model to Improve Student Activity and Learning Outcomes

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ABSTRACT

The purpose of this study was to determine the activeness and learning outcomes of students in the application of the group investigation (GI) cooperative learning model of class X SMA Negeri 14 Gowa. This study uses Classroom Action Research (CAR) which was carried out at SMA Negeri 14 Gowa. The type of data in Classroom Action Research uses observation sheets, test evaluation scores. Designed in two cycles covering the planning, action implementation, observation and reflection stages. The steps carried out in each cycle are (1) planning, (2) implementation, (3) observation, (4) reflection. The results showed that the process of applying the Group Investigation (GI) cooperative learning model on inflation material was proven to increase student activity and learning outcomes. The student activity observation sheet and teacher activity observation sheet can also be concluded as seen in the first cycle observations and second cycle observations.

Keywords: Learning Model; Cooperative Learning; Group Investigations;

INTRODUCTION

Efforts to improve the quality of human resources are currently being carried out by the government, these efforts cover various fields, one of which is the field of education. National Education System Law No. 20 of 2003 states that: Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, the community, nation and state.

Currently, education in Indonesia focuses on the quality of education on improving Teaching and Learning Activities (KBM) (Hussaini et al., 2020; La Hanisi et al., 2018; Potgieter et al., 2019). In the teaching and learning process, teachers and students are supporting factors in an effort to improve learning outcomes (Fuadiah & Suryadi, 2019). The role of the teacher is needed to support the creation of a fun teaching and learning atmosphere and allow students to achieve optimally. While students are involved in responding to, understanding, looking for material (Brinson, 2015; Mesker et al., 2018; Yuangga et al., 2017). Therefore, education

requires a model approach and appropriate learning techniques to facilitate teachers in teaching so that students are able to understand the material being taught. For this reason, it is necessary for teachers to utilize the teaching model to ensure the self-reliance and initiative of students in accordance with the development of knowledge and technology (Hussaini et al., 2020).

The learning model focuses more on true activities, where in the learning process there is basically reciprocity between teachers and students in order to gain knowledge, understanding, and other skills and behaviors including attitudes and values of new teaching looking at students as individuals and learning individually (Chiva-Bartoll et al., 2021; Hill et al., 2019). Therefore, the implications of teaching must be realistic, learn by interacting with teachers and students in cooperation and sympathy (Hussaini et al., 2020).

Teachers play an important role in the process of teaching and learning activities. One of the teacher's roles is as a facilitator and optimize student activity. Teachers are not only required to have the ability in experience but also to have practical abilities. This is very important because a teacher in learning not only guides but also teaches so that the material presented becomes a fun learning activity and is easily understood by students. So it is expected that teachers can use the right learning model by involving many students in the teaching and learning process.

The purpose of each teaching and learning process is to obtain optimal learning outcomes. This can be achieved if students are more direct and active physically, mentally, and emotionally. We can understand this in terms of learning activities which are direct student involvement in the learning process that is passed to achieve the learning objectives to be achieved. (Rofiqoh, 2015) classifies the types of activities into 8, namely: visual activities, oral activities, listening activity writing, drawing activities, motor activities, mental activities, emotional activities.

Activities in learning are very necessary because in principle learning is doing (learning be doing) to be able to change student behavior as a result of learning, because without learning activities it is impossible to run well. This activity occurs because of the interaction of individuals with the environment. Student activities here can be raised when the teacher is able to use the right learning model. The learning model will be able to stimulate student involvement, so that students are motivated to take lessons and compete to get good grades.

One of the learning models that can increase student activity is the group investigation (GI) cooperative learning model. Because this learning model aims to direct students' ability to analyze learning concepts by way of in-depth investigation through group work. In addition, the cooperative group investigation (GI) model requires students to have good skills in communication and group process skills. In line with the research conducted by (Arinda et al., 2019; Sojayapan & Khlaisang, 2020) related to the application of the group investigation (GI) cooperative learning model in history subjects, the results showed that the activities and student learning outcomes showed an increase. This can be seen in students who are increasingly showing high enthusiasm and motivation in doing assignments, presentations, and discussions, both in quality and quantity. In addition, it shows a better improvement. Likewise, research conducted by Hasan et al (2010) showed that the application of the cooperative group investigation (GI) model was able to increase student activity and learning outcomes. So based on the two studies above, it can be concluded that the group investigation (GI) cooperative learning model can increase student activity and learning outcomes.

Cooperative group investigation (GI) is a form of cooperative learning model that emphasizes the participation and activities of students to search for the material (information) of the lesson to be studied through available materials, for example from textbooks or students can search through the internet. Students are involved from planning, both in determining the topic and how to learn it through investigation. This model requires students to have good

communication skills and group process skills. The cooperative group investigation (GI) model can train students to develop independent thinking skills. Active student involvement can be seen from the first stage to the final stage of learning.

(Listiana & Hamdani, 2020) cooperative model group investigation GI) there are three main concepts, namely: research or inquiry, knowledge or knowledge, and group dynamics or the dynamic of the learning group. The research here is the dynamic process of students responding to problems and solving these problems. Knowledge is a learning experience obtained by students either directly or indirectly. Meanwhile, group dynamics shows an atmosphere that describes a group interacting with each other involving various ideas and opinions as well as exchanging experiences through a process of arguing with each other.

Based on the results of the daily test, it can be seen that there is a gap between theory and reality, namely in teaching and learning activities at SMA Negeri 14 Gowa the Economics subject does not attract students' attention and motivates students so that learning material cannot be absorbed by students. This can be seen from the results of students' daily tests, the highest score obtained was 85 and the lowest score was 55, while the average value was 65%. Only 55.45% of students completed.

The requirement for mastery learning is if at least 75% of all students in the class get a value of more than or equal to 75. This is contrary to student competence, because there are still many students who have not been able to achieve the Minimum Completeness criteria (KKM). This indicates that in this basic competency students still have difficulty in answering the questions given. The subject matter of this basic competency is the price index and inflation.

Based on the daily test observations that most of the incompleteness of the material inflation. Inflation is an increase in prices originating from a disturbance in the balance between the flow of money and goods. According (Pierloot et al., 2020) explains that inflation will occur if the level of prices and general costs rises or the weighted average of the prices of goods and services in the economy. economy. Students find it difficult to study inflation material because the material being studied is not limited to theory, but directly calculates and analyzes problems so that students cannot understand the intent and purpose of this material.

The low level of activeness and student learning outcomes for certain materials is due to the ineffectiveness of learning. The inactivity of these students is partly due to the lack of precise strategies applied by the teacher in learning. Conditions like this can cause students to sink into passivity. Therefore, there is a need for innovative learning strategies so that they can increase student activity and learning outcomes. One alternative to be able to overcome this is to use a learning model that is more effective and in accordance with the material being taught.

One of the learning models that can be used to increase activeness and learning outcomes in inflation is the group investigation (GI) cooperative learning model. Based on the above background, the researcher wants to conduct a study with the title "Application of the Group Investigation (GI) Cooperative Learning Model to Improve Activeness and Learning Outcomes of Class X Students on Inflation Materials at SMA Negeri 14 Gowa".

METHOD

This study uses Classroom Action Research (CAR). The term in English is Classroom Action Research (CAR) judging from the name, it shows the content contained in it, which is an activity carried out in the classroom. Classroom Action Research (CAR) is a research that

improves education by making changes towards improving education and learning outcomes (Suharsimi, 2009: 105). Classroom Action Research (CAR) has four stages in each cycle, namely planning, implementing actions, observing and reflecting. This classroom action research aims to determine the level of achievement of students' activeness and learning outcomes on inflation material by implementing a Group Investigation (GI) cooperative learning model action. The four stages in action research are elements to form a cycle, namely one round of successive activities, which return to the original step. So one cycle is from the drafting stage to the reflection stage, which is nothing but evaluation.

This Classroom Action Research was conducted at SMA Negeri 14 Gowa. The school's address is on Jalan Malino Km 2 Kab. Gowa. assisted by Mrs. Bungawati's sister as an observer, also an economics teacher at SMA Negeri 14 Gowa. The subject of this research is class X-4 SMA Negeri 14 Gowa even semester of the academic year 2017/2018 the number of students studied is 32. This is evidenced because this class has the lowest percentage of completeness among other classes. In addition, the class is also very difficult to control and less active in learning.

The type of data in Classroom Action Research uses an observation sheet, Test Evaluation Value. This research is a Classroom Action Research (CAR) which is designed in two cycles including the planning, action implementation, observation and reflection stages. The steps carried out in each cycle are (1) planning, (2) implementation, (3) observation, (4) reflection.

Data analysis is a way of managing data that has been obtained from documents. The data analysis techniques used are: (1) The value of student learning outcomes is analyzed descriptively. (2) Data in the form of information in the form of sentences that provide an overview of students' expressions, level of understanding of a subject (cognitive), students' views or attitudes towards new learning models (affective), student activities following lessons, attention, enthusiasm in learning, trust self, learning motivation and the like can be analyzed qualitatively.

RESULTS AND DISCUSSION

Application of the Group Investigation Cooperative Learning Model on Inflation material for X-4 grade students of SMA Negeri 14 Gowa. One of the cooperative learning models that can be applied is Group Investigation (GI), where in this learning students are required to think actively and creatively in solving a problem and express their opinion by issuing a card as a sign that they have the ability to speak. In Group Investigation (GI) cooperative learning, students are heterogeneously grouped into several groups, where in one group consists of five students, with the aim that all students can be actively involved in the learning process so that interactions arise between fellow students to respect each other's opinions. others and provide motivation to achieve optimal learning outcomes.

The application of the Group Investigation (GI) cooperative model in the subject of Economics, especially Inflation material for class X-4 students at SMA Negeri 14 Gowa in accordance with the procedures for implementing learning can be described as follows:

Discussion on Inflation

The discussion of Inflation learning material is carried out in the early stages of learning implementation. The discussion of the material aims to make students have a clear picture of the material to be discussed.

Before explaining the learning material, the teacher first explains the learning objectives in the inflation material. then the teacher explains the inflation material and explains in general terms using the Group Investigation (GI) learning model. After presenting the material, students work in groups to complete the subject matter through discussion. So that they can discuss with the reference that has been explained by the previous teacher.

Group Formation

The formation of groups of students in class X-4 in this learning is adjusted heterogeneously, perhaps based on the value or achievement shown in the Economics learning material. In group formation, the teacher divides the class into six groups with five students in each group.

Sharing of Discussion Topics

Before starting the discussion, an answer sheet from the discussion was made. The distribution of discussion topics was carried out after the teacher presented a case study on the subject of inflation using the Group Investigation (GI) cooperative learning model and the students of class X-4 sat in groups according to the predetermined group division.

Group discussion

In the work on the topic of discussion of Inflation, class X-4 students must work with group discussions. They must share knowledge and experiences between group members, share and conclude information, help each other to achieve common goals and respect the opinions of other group members. While the role of the teacher is only as a facilitator where the teacher will help students if they really need help.

Discussion of Discussion Results

In discussing the results of this discussion, the teacher provides opportunities for all groups to read the results of their group discussions in front of the class and other groups listen, provide responses, or provide rebuttals. At the end of the discussion, the teacher also provides an opportunity for students to provide conclusions from the material studied, namely inflation. then the teacher ends the lesson by drawing conclusions carried out in both cycles.

Test

After students work in groups, it is necessary to conduct a test evaluation, then the results of the test evaluation are given a score as a reference to determine the increase in student learning outcomes. An evaluation test (evaluation test) is given in each cycle to determine students' abilities after learning actions using Group Investigation (GI) are carried out and to determine the increase in students' abilities in implementing inflationary learning material. in doing the evaluation test is required to work individually.

The application of the Cooperative Group Investigation (GI) Model can Increase the Activeness and Learning Outcomes of Class X-4 Students of SMA Negeri 14 Gowa on Inflation Learning Materials.

In accordance with the theory put forward by Djamrah (2006:107) that to measure the success of the learning process, it is divided into several levels as follows: (a) special or maximum, if all learning materials can be mastered by students, (b) very good or optimal, if most of the subject matter can be mastered 76%-99%, (c) good or minimal, if the subject matter is only controlled 60%-75%, (d) less, if the material is mastered less than 60%.

Student learning outcomes after the implementation of the Group Investigation (GI) cooperative learning model has shown an increase from cycle 1 to cycle 2. From the implementation of the action cycle 1, it is known that the evaluation score of this test resulted in an average student score of 75.14, the lowest score obtained students is 65.56 and the highest score is 82.22. From the results of this test, it is known that 65.63% (21 students) have completed their studies and 34.37 (11 students) have not completed their studies. with student activity in the first cycle of action is still in the "good" category with an average percentage of teacher activity in learning of 71.87%. While the results of observations on student activities in applying the Group Investigation (GI) cooperative learning model in the first cycle of action with a percentage of 67.50%, this can be interpreted that based on the results of observations made by researchers the level of success is included in the "good" category.

In the second cycle of action, it is known that the acquisition of test evaluation scores resulted in the average value of student test results being 84.43. The lowest score obtained was 81.67 and the highest score was 90. From these results, it is known that all students in class X-4 have completed their studies with a 100% completeness percentage. Likewise, the results of observations on teacher activities in explaining learning with the Group Investigation (GI) model in the second cycle of action with a percentage of 96.87%, it means that teacher activities in managing classroom learning are included in the "Very Good" category. Meanwhile, student activity in the second cycle is included in the "Very Good" category with an average percentage of student activity in learning of 82.50%. The following is an analysis of the learning outcomes of class X-4 students on the subject of inflation in the first and second cycles of action. as shown in table 1.

Table 1. Comparative Data on Learning Outcomes in Cycle I and Cycle II for Class X-4 Inflation Metrics for the 2017/2018 Year

No	Test Results	Mark		Information
		Cycle I	Cycle II	
1.	The highest score	82,22	90	Go on
2.	Lowest value	65,56	8167	Go on
3.	Class average	75,14	84,43	Up 9.29
4.	Number of students' completeness	20	32	Go on
5.	Number of students' incompleteness	12	0	Down
7.	Percentage of completeness	65,63	100	Up 34.37
8.	Percentage of incompleteness	34,37	0	Down

Source: Data on learning outcomes of cycle I and cycle II for class X-4 (after processing).

When compared with the average value of student test evaluations in the first cycle of action, the average value of the second cycle test evaluation has increased by 8.29% in addition to experiencing an increase in the class average value, there is also an increase in the percentage of student learning completeness by 34.37% and it can be said that in this second cycle the percentage of learning completeness in the second cycle of actions reached a perfect number, namely 100%. This increase was also offset by an increase in student activity of 76.97%. the following table analyzes the activities of teachers and students during the learning takes place in the first and second cycles of action.

Table 2 Comparative Data of Cycle I and Cycle II Teacher Activities and Students in Learning Inflation Materials

No	Activities in Learning	Mar (%)		Information (%)
		Cycle I	Cycle II	
1	Teacher Activities	71,87	96,87	Go on 25
2	Student Activities	67,50	82,50	Go on 15

Source: Analysis of the value of the activity of teachers and students in class X-4 (data after processing)

Explains that successful learning must go through various kinds of activities, both physical and psychological activities. Physical activity is that students are active with their limbs, make things, play, or work, they don't just sit, listen, watch or are just passive. Students who have psychic activity (mental) are if their mental power works as much as possible or only functions in the context of learning when students are physically active, they are also mentally active, and vice versa. So, more precisely, the activity itself can be owned by everyone so that the person wants to try.

The increase in student activity and learning outcomes experienced by class X-4 using the Group Investigation (GI) cooperative learning model has shown the success of the method used. Classes with the Group Investigation (GI) learning model show a fairly high completeness of learning outcomes. The implementation of the second cycle of learning has increased. The results of the reflection in cycle II showed that the teacher was skilled enough in applying the Group Investigation (GI) learning model, the teacher also played an active role in learning so that the learning scenario could run according to the expected goals.

The application of the Group Investigation (GI) cooperative learning model makes students not only memorize the material given by the teacher, but students can understand what is learned and apply the material that has been conveyed through discussion activities with their group friends. Based on the results of observations and student learning outcomes in cycle II, classical completeness has been achieved with an average class percentage of 84.43% and student activeness of 82.50%. Thus the indicators of success have been achieved well, so there is no need for the next cycle to be held.

Based on the description above, it can be concluded that cooperative learning with Group Investigation (GI) has increased the percentage of student learning mastery and the percentage of student activity in participating in class learning, and these results indicate that the application of Group Investigation (GI) cooperative learning can increase the activity and student learning outcomes in class X-4 on the subject of inflation.

CONCLUSION

The process of applying the Group Investigation (GI) cooperative learning model on inflation material has been proven to increase the activeness and learning outcomes of students in class X-4 SMA Negeri 14 Gowa. This is evidenced by the average grade X-4 where in the first cycle is 75.14 in the second cycle is 84.43 so the average class increases by 9.29%. In addition, the percentage of students' completeness increased from 65.63% in the first cycle to 100% in the second cycle. So the increase is 34.37%. The student activity observation sheet and teacher activity observation sheet can also be concluded as seen in the first cycle observations and second cycle observations. Thus, the increase in student activity in Inflation learning increased by 15%, from 67.50% in the first cycle to 82.50% in the second cycle. Teacher activity also increased by 25%, namely 71.87% in the first cycle, increasing to 96.87% in the second cycle.

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