

## THE ANALYSIS OF THE EFFECTIVENESS OF GROUP INVESTIGATION METHOD IMPLEMENTATION IN INCREASING STUDENT LEARNING OUTCOMES

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**Abstrak:** Melalui penggunaan pendekatan *group investigation*, penelitian ini berupaya untuk meningkatkan hasil belajar siswa. Pendekatan ini, yang merupakan jenis pembelajaran kooperatif, menekankan pada keterlibatan dan keaktifan siswa dalam menemukan sendiri materi pembelajaran (pengetahuan) yang dipelajari melalui alat pembelajaran yang tersedia. Penelitian Tindakan Kelas (PTK) merupakan metodologi penelitian yang digunakan dalam penelitian ini. Untuk membantu guru dalam menyelesaikan masalah yang muncul di kelas, dilakukan penelitian tindakan kelas. Dalam penelitian ini, dua siklus dengan masing-masing dua sesi digunakan untuk melakukan penelitian. Wawancara, dokumentasi, ujian pencapaian pembelajaran, dan catatan observasi adalah alat yang digunakan peneliti. Hasil penelitian menunjukkan bahwa pembelajaran berbasis *group investigation* dapat meningkatkan hasil belajar siswa yang ditunjukkan dengan peningkatan hasil belajar siswa pada siklus I dan II. Nilai rata-rata hasil belajar siswa >75 pada siklus I, meningkat menjadi >80 pada siklus II. Selain meningkatkan hasil belajar siswa, metode *group investigation* juga dapat meningkatkan partisipasi siswa yang akan membuat mereka lebih bersemangat dalam proses pembelajaran.

*Kata kunci:* hasil belajar, siswa, *group investigation*, kelas

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**Abstract:** Through the use of the *group investigation* approach, this research seeks to improve student learning results. This approach, which is a type of cooperative learning, places an emphasis on the involvement and activity of the students in finding their own learning material (knowledge) that is learned through readily available instructional tools. Classroom action research (CAR) was the research methodology used in this study. To assist teachers in resolving issues that arise in the classroom, classroom action research is conducted. In this study, two cycles with two sessions each were used to perform the research. Interviews, documentation, learning accomplishment exams, and observation logs are the tools that researchers employ. The findings of the research reveal that *group investigation*-based learning can enhance student learning outcomes, as shown by an improvement in student learning outcomes in cycles I and II. The average value of student learning outcomes was > 75 in cycle I, and it increased to > 80 in cycle II. Along with improving student learning outcomes, the *group investigation* method can also boost student participation, which will make them more passionate about the learning process.

*Keywords:* learning outcomes, student, *group investigation*, class

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### Introduction

Humans are God's most perfect creatures, the reason being that humans were created with perfect minds and thoughts. Apart from that, humans have a complete physical and spiritual structure as well, so it can be concluded that humans are perfect creatures that have been created by God. With reference to this principle of creation, according to the philosophy of education, humans are beings who have the potential and have the opportunity to be educated. Basically, education itself is a conscious activity in the form of guidance to develop divine potential so that humans can play themselves as servants of God effectively and

optimally (Hamalik, 2005). Thus, education is a gradual, programmed, and continuous activity. In the course of their lives, humans face a process of development, starting with physical and spiritual development. This element will continue to develop according to its potential, and so that this potential runs perfectly, humans must make an effort, one of which is learning. By learning, humans can maintain their lives and get to know more about the potential they have (Kunandar, *Professional Teachers: Implementation of the KTSP Curriculum*, 2007).

Getting knowledge is only one aspect of learning. Learning is described as "a mental process that occurs within a person, causing a change in behaviour" by Wina Sanjaya. The reason for this mental activity is that the person is actively interacting with their surroundings. Education is used to try to increase the calibre of learning. According to Oemar Hamalik "education is a conscious effort to transform knowledge and skills that are organized based on a mature, clear, steady, complete, and thorough plan based on rational-objective thinking that aims to prepare students for their role in the future". From the above definition of education, it can be concluded that good education is education that is carried out in a mature, clear, complete, and comprehensive manner. It is hoped that in this way educational objectives can be adequately achieved in accordance with Law No. 20 of 2003 governing the National Education System. The objectives of national education are to give pupils the spiritual, social, intellectual, and practical capabilities. And most importantly, education can in still in a person faith and devotion to God Almighty (Mohzana, 2023).

Learning requires a process that is not instantaneous. Learning is not a goal but a process to achieve a goal. So, are the steps or procedures taken? Through a variety of contacts and learning opportunities, kids are primarily encouraged to develop their religious morals, behaviours, and creativity (Fahrurrozi, 2023). As a result, regulating the teaching and learning process requires teachers to play a crucial role. As a teaching manager, a teacher must be able to manage the entire process of teaching and learning activities by creating learning conditions in such a way that each student can learn effectively and efficiently. Therefore, the role of an educator becomes absolute in designing good learning (Kunandar, 2007). Creating an active, effective, and efficient learning process is the responsibility of a teacher. Teachers are required to have creativity in designing learning models, not only focusing on achieving a learning goal but also paying attention to how to achieve these learning goals. If the teacher is able to create good learning methods and designs, it is not impossible that the teaching and learning process will be fun, students will be more active in their participation, and students will achieve a satisfactory learning result (Madjid, 2020). However, when things that are inversely proportional are actually experienced at school, it is inevitable that problems hinder the learning process. This problem arises not only from teachers but also from students, because education is a process of interaction between teachers and students. One of the causes of the delay in the learning process is the lack of enthusiasm of students for participating in teaching and learning activities. Students become bored because of the lack of participation, which makes learning monotonous and only centred on the teacher (Kamaruddin, 2023).

From the results of the interviews that the researchers conducted with several students, one of the problems that existed in teaching and learning activities felt by students was boredom due to the lecture method used by the teacher. The use of the lecture method was boring because it should be exemplified in its application in everyday life. Knowledge will be more abstract if it is only conveyed through verbal language. This allows verbalism to occur, meaning that students only know about words without understanding the meaning contained in them. "Another thing is that the delivery of information only through verbal language, besides being able to cause verbalism and misperceptions, will also reduce the enthusiasm of students to catch messages because they are not invited to think about and live up to the messages conveyed, even though understanding something requires the involvement of students both physically and psychically (Nugroho, 2023).

Not to mention that because there are so many students in one large class, the teacher's voice is sometimes not heard by students sitting at the back. Students become less understanding of the material presented; this is what causes low student learning outcomes (Parinussa, 2023). Another problem is that teachers sometimes only follow the material in the handbook without looking for other sources (textbooks). This makes students only focus on one source, namely the teacher. How well a teacher organizes a process of teaching and learning activities is one of the aspects that influences the attainment of competency in a subject. The choice of a relevant and adequate strategy to promote pupils' learning is a problem for a professional teacher (Kamaruddin I. N., 2020). The execution of tasks that are defined by proficiency in both material and procedures will represent professional teachers.

Learning methods have progressed a lot, and traditional lecture methods are slowly being abandoned. The teacher is no longer a central figure that dominates teaching and learning; by using the active learning method, the teacher becomes a facilitator who facilitates students in improving their abilities (Sanjaya, 2008).

When researchers interviewed one of the teachers, it was found that traditional methods such as lectures were the ones that the teacher often used and rarely used active learning methods (Slameto, 2015). The lecture method focuses more on the teacher's ability to convey material, so passive students only listen to what the teacher says. Efforts to solve the above problems and produce interesting learning so that students take an active role in learning are to use active learning methods, one of which is a method called group investigation (Uno, 2016). This method is one of the fun strategies used to strengthen students' knowledge of the material being studied.

## **Method**

CAR, or classroom action research, was the research methodology used in this study. Students who still had poor learning results (29 students) were the study's subjects. In this study, researchers acted as planners and implementers of research activities. Researchers make activity plans, carry out activities, make observations, collect and analyse data, and report research results. In this study, the researcher was assisted by a teacher as a collaborative partner (collaborator). Using the group investigation approach, the teacher serves as an observer to assess the researchers' strengths and weaknesses in the learning process. As a collaborator, that means helping researchers make learning implementation plans (RPP), reflect, and determine the actions to be taken in the next cycle. As an observer, namely giving an assessment of researchers in carrying out the teaching process by applying the group investigation method, observing student activities during the learning process, and assessing student learning outcomes after being given a post-test in each cycle. To achieve research results that are accurate and in accordance with research objectives, strong solidarity is needed between researchers and subject teachers. Both have a very important role. Tests, documentation, interview guidelines, and observation logs were all employed as data collecting tools.

## **Findings and Discussion**

Based on the observations and interviews, it was discovered that the teacher had not yet put his teaching methods into practice. The learning approach that had been used up until this point was the lecture method. The teacher explained that if using the active learning method, students were not able to fully participate actively, and student attitudes, who tend to be less active in class, also affected learning outcomes. The less effective learning process became the basis for researcher's application of learning using the group investigation method. Based on these interviews, class VI-A, with a total of 29 students, was chosen as the class to be used as a research site due to the low student learning outcomes. Learning action cycle This is a very important action because the analysis of the results of this learning action will be used as a reflection for researchers on further learning actions. Cycle I research was conducted over the course of two meetings, each lasting 35 minutes.

In Cycle I, observation tasks were completed by keeping an eye on all learning-related activities while using instructor and student objects. This direct observation is because the researcher uses the PTK method, which is an activity that involves the researcher directly from the beginning of the research to the end of the research. The following information was gathered based on the observer's observations of teacher and student activities throughout the first cycle of learning: In Meeting 1 there were 73.64% of observations of instructor activities, and in Meeting 2 there were 80.91%. Although the teacher's instructional activities have demonstrated success in a number of areas, there are still certain areas that need to be improved. In explaining the steps of the group investigation method, the teacher is still lacking in providing information to students because there are still students who do not know their duties and responsibilities in discussion groups. The teacher needs to make further improvements when urging pupils to follow the learning process because some students are still not paying attention to what the teacher is saying. Observations of student activities at meeting 1 revealed that 69.44% of them were completed, whereas meeting 2 had a completion rate of 76.67%. Based on the findings of the student activities observed in meeting 1, not all students participated in the activity in the aspect of using the group investigation method because many students still did not understand their duties in using this group investigation method because this method was used for the first time in the class. Who do not pay attention to what the instructor is saying? Whereas at meeting 2, not all students discussed well in their groups; some students still relied on their group mates to complete the assignments given; and there were still some students who were not brave enough to express their opinions in front of the class.

Cycle I learning assessment was carried out to measure students' knowledge with the group investigation method. The final test of cycle I was for all students of class VI-A who attended, with a total of 27 students and 2 students who were absently I was for all students of class VI-A who attended, with a total of 27 students and 2 students who were absent. According to the assessment's findings, cycle I students

achieved learning outcomes with an average post-test score of 75.56, the lowest score being 58 and the best being 94. Students who scored less than KKM were 9 students, while students who received scores above KKM were as many as 18 students. This means that the group investigation learning method has not been effective in increasing learning outcomes. As a result, this success indicator has not been fully attained. As a result, the researcher moves on to cycle II in an effort to correct and enhance the flaws present in cycle I. As a result, in order to prepare for cycle II activities, etc., cycle I's shortcomings must be fixed.

Based on the information the researcher collected from the collaborator teacher's observations of the teacher's instruction and student learning activities recorded on observation sheets, several obstacles were found in cycle I that occurred in the first and second meetings, as follows: Teacher activity was not maximized when using the group investigation method. Not optimal in conveying learning material, so some students do not focus on paying attention to the teacher's explanation. Not optimal in class management, especially during discussions. I haven't mastered the class well. Haste in the use of time estimates There are still students who have not met the KKM mark. Students have not been fully involved in the use of learning methods and media. Lack of understanding of the steps of the group investigation method makes some students feel bored. There are students who still depend on friends when discussing There are still students who are reluctant and don't have the courage to present the results of the discussion.

Of the 27 students that took the final cycle I test, according to the findings of the student learning assessment, only 19 had achieved the KKM score; the remaining 8 students still had not reached the KKM score. This shows that the learning cycle I has not been maximized and still needs to be continued in the next cycle. The researchers and the collaborator instructors intend to enhance the learning activities in cycle II in light of the outcomes of the cycle I learning and evaluation activities. These enhancement strategies comprise: directing students' attention on the explanation being given by the teacher. Apply the group investigation method's steps correctly. Students who don't want to follow the phases of the group research approach should receive extra clarification. Reprimand students who do not follow the learning process properly. Manage noisy and undisciplined students during the learning process. Emphasize students who are less active and tend to rely on friends during discussions. Use the best possible time estimate.

It is possible to conduct observational activities by keeping an eye on both the teacher's and the students' actions during the learning process. According to what the observer saw throughout the second cycle of learning in terms of both teacher and student activity, the following data were obtained: teacher-teaching activities at the third and fourth meetings in cycle II, all aspects observed were in a good category. The teacher is able to maximize the method used and follow the results of the reflection of cycle I. The teaching activities of students at the third and fourth meetings in cycle 2 in all aspects observed have shown a good category. The group research technique engages students more actively in class learning activities.

Assessment of learning in cycle II was carried out to determine student learning outcomes after being given treatment with the group investigation method. In the final test of cycle II, all students of classes VI-A attended, for a total of 29 students. The assessment results for cycle II demonstrate that student learning outcomes for cycle II have improved over cycle I, and the post-test results for cycle II reveal a decrease in the number of students who receive scores below the KKM. The lowest score during the post-test was 68, while the highest post-test score was 98, and the average post-test score increased to 82.14. From this description, we can see that all learning outcomes have increased. Thus, an indicator of the success of this research has been achieved. Based on the data that has been obtained through the teacher and student observation sheets in cycle II, it can be seen that the learning process during cycle II has been going well, and an increase in the assessment aspect has also been achieved. It can also be seen from the final results that all students have achieved the KKM value. Therefore, the application of the group investigation method at all stages and steps of learning has been running and implemented well.

The researcher was joined by a cooperating teacher who served as an observer for all learning activities, including both student and teacher activities, throughout the process of putting the action into practice. From the first meeting in cycle I through the fourth meeting in cycle II, the observer is responsible for evaluating the circumstances and actions of all learning activities. In cycle II, student engagement rose while learning utilizing the group investigation technique, with student activity increasing to 86.67% and instructor activity increasing to 90.91%. From the results of the learning tests that have been carried out by students, the highest score, lowest score, and average score of student learning outcomes are obtained. If pupils receive scores below 67, the research is said to have failed as an indicator of student learning outcomes. based on the proportion of students whose learning outcomes have grown beginning with the final exam cycle I and continuing with the final test cycle II.

Student interviews were conducted after the end of the learning activity using the group investigation

method. According to the interview findings, learning through the group research technique increases students' comprehension of the subject matter being covered. Additionally, as shown by the improved student learning results in each cycle, students become more engaged in their education. This shows that classroom action research using the group investigation method has been successfully carried out by researchers because of its positive implications for the learning process.

In cycle I, there were a number of challenges to learning activities, such as the teacher not communicating learning material to students as effectively as they should have, and some students not paying attention to the material presented by the teacher due to the teacher's poor class management and time management. As a result, student activity in learning activities using the group investigation method was carried out with a percentage of around 69.44%. Similar results were found for instructor activity, which was observed to be 73.64%. The student activity toward learning utilizing the group investigation approach increased in the second meeting and was 76.67%, although there were still some students who still depended on their group mates when discussion activities took place. At this second meeting, the teacher's activity has increased. Aspects of the teacher's teaching activity have shown a good category; at this meeting, it was implemented at 80.91%. Testing was done at the end of cycle I to gauge how well the group research method had helped the students learn. The end cycle I test results showed that the average student score was 75.56. The final cycle I test was given to 27 pupils, and 18 of them received a KKM score of 67. The learning process still has to be enhanced in the upcoming cycle.

The learning activity was conducted over the course of two meetings in cycle II. Data were gathered from observations of teachers' teaching activities and students' learning activities during the second cycle of learning activities. The teacher's teaching activities and the students' learning activities increased at the third meeting. And at the fourth meeting, which was the last meeting in the learning action cycle II, the teacher's teaching activities showed a good category in accordance with the improvements made after the first cycle was carried out. Student activity increased to 86.67%. Likewise, the observation of teacher activities increased to 90.91% for all aspects observed. Additionally, a test was run at the conclusion of cycle II to gauge the improvement in student learning outcomes following treatment with the group investigation approach. All 29 of the students who took the final cycle II test met the KKM cut-off. Cycle II's average student learning outcome was 82.14. The second cycle saw an average gain of 6.58 when compared to the 75.56 average student learning outcomes at the end of the first cycle. This shows that action research stopped in cycle II because action learning in cycle II succeeded in improving student learning outcomes.

## **Conclusion**

In the first cycle, based on the results obtained at the first meeting, the teacher's activity was carried out 69.44% of the time, while the student's activity was carried out 73.64% of the time. Then, in the second cycle of the fourth meeting, teacher activity and student activity increased, with teacher activity increasing to 90.91% while student activity increased to 86.67%. The acquisition of these results shows that learning by applying the group investigation method can be said to be successful. Judging from student learning outcomes, it is evident that the use of the group inquiry method can improve student learning outcomes. This can be proven by the analysis obtained from the results in cycles I and II. The average student gain in Cycle I was 75.56. Of the 27 students who took the final results test for cycle I, there were 18 whose scores had reached the KKM, which was 67. Furthermore, in cycle II, the average student score increased to 82.14, and all students achieved the KKM score. In cycle II, it experienced an average increase of 6.58. This shows that action research stopped in cycle II because action learning in cycle II succeeded in increasing student learning outcomes. The group investigation method can be used as an alternative to improve student learning outcomes. Besides that, it can be implemented as material for studying learning approaches for teachers. Learning using the group investigation method was able to improve student learning outcomes. Therefore, in an effort to improve the quality of learning, this method can be used and developed for further learning according to the material. Learning using the group investigation method can be used as a variation in determining the method to be used so that learning is active and enjoyable for students. So that the implementation of student activities in learning can be carried out properly and independently, it needs to be supported by other learning resources that can be used as guidelines in learning activities. Therefore, the school is expected to be proactive in facilitating all the needs of teachers and students in an effort to improve the quality of education services.

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