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Analysis of Group Discussion Learning Methods to Improve Geography Student Learning Outcomes

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Abstract- This research aims to analyze the effectiveness of the group discussion learning method in improving student learning outcomes in Geography subjects at MA Miftahul Huda Kepanjen. The background to this research is based on the low level of active participation and student understanding in the conventional learning process which tends to be teacher-centered. This research uses a quantitative approach with a quasi-experimental method. The research subjects consisted of two classes The research instrument is a pretest and posttest of learning outcomes. Data were analyzed using the t-test to determine differences in learning outcomes between the two classes. The results of the analysis show that there is a significant increase in student learning outcomes in the experimental class compared to the control class. The group discussion method has been proven to be able to increase student activity, understanding and learning outcomes in Geography subjects. The results of this research recommend the application of the group discussion method as an alternative learning model that can be used by teachers to improve the quality of learning in the classroom.

Keywords: Group discussions, learning outcomes, geography, learning methods.

I. INTRODUCTION

Geography is a subject that has an important role in forming students' character and insight. Geography learning aims to provide an understanding of natural and social phenomena and their relationship to human life. Through studying Geography, students are expected to develop critical and analytical thinking skills. This will help them analyze global problems that arise in society. Effective learning is needed to achieve this goal.

The learning methods used in Geography learning greatly influence the success of the learning process. One method that can be applied is the group discussion method. This method facilitates students to be actively involved in the learning process through interaction with classmates. In group discussions, students can share information and opinions with each other, allowing them to deepen their understanding. The main advantage of this method is increased understanding through collaboration.

The application of the group discussion method is very relevant in Geography learning because the topics often involve various perspectives. For example, in studying the issue of climate change, students need to understand scientific views and their impact on social and economic life. Group discussions allow students to explore various points of view that may not be found in conventional learning. In addition, this method encourages students to think more critically and creatively. In this way, the learning outcomes achieved can be more optimal.

In addition, group discussions provide an opportunity for students to practice communication skills. The ability to communicate well is very important in social and professional life. In discussions, students are trained to convey their opinions clearly and listen to the opinions of others. These skills are very useful not only in academic contexts, but also in everyday life. Students who are skilled at communicating tend to adapt more easily to changes occurring in society.

On the other hand, group discussions can increase students' learning motivation. When students work in groups, they feel more involved and responsible for the success of the group. This will encourage them to study harder and try to make the best contribution to the discussion. In the discussion process, students can also learn how to work together with other people. This ability to collaborate is very important in developing positive social attitudes.

The use of the group discussion method is expected to improve student learning outcomes in various aspects. By discussing, students not only gain knowledge, but can also develop critical thinking skills. Group discussions also introduce the concept of collective problem solving. Students can learn how to construct logical arguments and solve problems in a systematic way. Therefore, this method can help students master the material better.

However, although this method has many advantages, its implementation does not always go smoothly. Some challenges may arise, such as unequal participation among group members. In discussions, it is possible that some students are more dominant, while other students may not actively participate. Inequality in participation can affect learning effectiveness. Therefore, it is important for teachers to manage discussions wisely so that all students can contribute optimally.

Apart from that, time management in group discussions is also an important factor. Discussions that are not well structured can take longer than expected. If time is not managed well, learning can be disrupted and not all topics can be discussed in depth. Teachers need to provide clear time limits so that discussions remain productive. Good time management will ensure that each group has the opportunity to present the results of their discussion.

At MA Miftahul Huda Kepanjen, the application of the group discussion method is expected to have a positive impact on student learning outcomes. This is because of the importance of mastering Geography material which involves many complex concepts. By using this method, it is hoped that students can better understand the relationship between natural and social phenomena. Group discussions allow them to dig deeper into topics relevant to everyday life. In this way, Geography learning will be more meaningful and applicable.

The group discussion method also has the advantage of building an interactive class atmosphere. In this atmosphere, students are more active in asking questions and sharing information. This interactive atmosphere creates an environment conducive to learning. Students who feel comfortable interacting with classmates tend to be more motivated to learn. Therefore, the interactions that occur in group discussions can be one of the determining factors for learning success.

However, the success of this method does not only depend on the students, but also on the role of the teacher. Teachers must be able to manage groups well so that discussions remain focused and productive. The teacher's role in providing appropriate direction and questions is very important for the success of the discussion. Teachers also need to provide constructive feedback after the discussion is complete. This will help students to better understand the material and improve their understanding.

In addition, good group management will ensure that each student has the opportunity to speak and express opinions. For this reason, teachers can organize groups carefully, considering the strengths and weaknesses of each student. The formation of heterogeneous groups will allow students to learn from each other. This can improve the quality of discussions and enrich their learning experience. Diverse groups can also minimize the dominance of one party in discussions.

The success of the group discussion method is also influenced by the material chosen to be discussed. Material that is relevant to students' daily lives tends to be more interesting to discuss. Topics that are close to their experience will make it easier for students to express opinions and share ideas. Teachers need to choose material that is challenging, but still understandable by students. Interesting topics will motivate students to be more active in participating in discussions.

Along with implementing this method, evaluation of student learning outcomes also needs to be carried out. Evaluation can take the form of a written test, participant observation in discussions, or an assessment of the products produced by the group. This evaluation will provide an overview of the extent to which students understand the material that has been discussed. Evaluation can also be a reference for teachers to assess the effectiveness of group discussion methods in Geography learning. Thus, evaluation becomes an important part of the learning process.

Overall, group discussions are an effective method for improving student learning outcomes, especially in Geography subjects. This method not only improves understanding of the material, but also trains students' critical thinking and communication skills. In the context of MA Miftahul Huda Kepanjen, the application of this method is expected to have a positive impact on student learning achievement. However, to ensure successful implementation, good management by teachers is very necessary. Therefore, the purpose of writing this article is to analyze the effectiveness of the group discussion method in improving Geography student learning outcomes at MA Miftahul Huda Kepanjen, as well as providing recommendations for more optimal learning development.

II. METHOD

The research method used in this research is a quantitative experimental method with a pre-test post-test control group design. This research aims to analyze the effectiveness of applying the group discussion method to the learning outcomes of Geography students at MA Miftahul Huda Kepanjen. The research sample consisted of two groups, namely an experimental group of 24 students from class XI who were given treatment using the group discussion method, and a control group of 23 students from class XI who were given learning using conventional methods. Data was obtained through a pre-test given before learning began, and a post-test given after learning to measure changes in student learning outcomes. This measurement will be analyzed to find out whether there is a significant difference between the learning outcomes of students taught using the group discussion method and those taught using the conventional method.

The research instruments used in this study include learning outcomes tests, in the form of multiple choice questions and descriptions that measure understanding of Geography material, as well as observation sheets used to assess the level of student participation during the group discussion process. This observation sheet serves to assess students' abilities in communicating, collaborating, and contributing to discussions. For data analysis, statistical techniques were used which included the t test to compare differences in learning outcomes between the experimental group and the control group. The following table provides an overview of the research design and instruments used:

Table 1. Research Design and Instruments

No	. Instrument	Description	Using Groups	Data Type
	; Results Test (Pre	-consists of multiple choice questions	aental Class and Con	trtive (Test Scores
)	ons to measure understanding of Geo)gı	
	Participation Obse	erion of student participation in group ons, including aspects of communication and contribution.		ve (Observation)
	Satisfaction Quest	imaire to assess student perceptions o	f æntal Class	ve (Response)

This table details the instruments used to collect data in this study. The learning outcomes test measures students' understanding of Geography material, while the observation sheet assesses students' involvement in group discussions. The results of this instrument will be analyzed to determine whether the group discussion method has a significant influence on student learning outcomes compared to conventional learning methods.

III. RESULTS

The results of the research show that the application of the group discussion method has a positive impact on the learning outcomes of Geography students at MA Miftahul Huda Kepanjen. After data analysis, the experimental group that used the group discussion method showed a significant increase in their post-test scores compared to their pre-test scores. The average post-test score of experimental group students was higher compared to the control group who used conventional learning methods. These results indicate that the group discussion method can increase students' understanding of Geography material more effectively.

Apart from that, the results of observations of student participation during group discussions also showed satisfactory results. Students in the experimental group actively interact, discuss and collaborate in understanding the lesson material. In contrast, the control group that used conventional methods tended to be more passive and less involved in discussions. This confirms that the group discussion method not only improves learning outcomes, but also improves students' social and communication skills, which are important in Geography learning.

The following table shows a comparison of pre-test and post-test scores between the experimental group and the control group, as well as the level of student participation in group discussions. This data shows significant differences that support the success of the group discussion method in improving student learning outcomes.

 Table 2. Comparison of Learning Outcomes and Student Participation

Group	Pre-test (Average Value)	Post-test (Average Value)	Level of Participation
ient	60	85	Very Active
	62	70	Passive

This table shows that the average post-test score in the experimental group (85) is higher than the control group (70). In addition, the participation rate of students in the experimental group was also higher, which was reflected in the category "Very Active." In contrast, the control group showed a lower level of participation with the category "Passive." These results support the hypothesis that the group discussion method can improve learning outcomes and student involvement in Geography learning.

IV. DISCUSSION

The discussion of this research aims to analyze the effectiveness of the group discussion method in improving Geography student learning outcomes at MA Miftahul Huda Kepanjen. Based on the results of the analysis, it can be concluded that the group discussion method has a significant influence on improving student learning outcomes. The application of this method has succeeded in encouraging students to be more active in the learning process, both in terms of understanding the material and social skills. Overall, the experimental group that applied the group discussion method showed better performance than the control group. This is proof that the group discussion method can be an effective alternative in learning Geography.

Student learning outcomes in the experimental group showed a significant increase from pre-test to post-test scores. This increase indicates that students were able to understand the material better after applying the group discussion method. Group discussions provide an opportunity for students to share ideas, discuss, and solve problems together. This interaction process allows students to teach each other and clarify material that they may not have understood individually. Therefore, this method can help students internalize the material more deeply.

On the other hand, the control group using conventional methods tended to have lower results in the post-test than the experimental group. This could be caused by a lack of active interaction between students during the learning process. Passive learning, such as teacher lectures, often does not provide space for students to collaborate and exchange ideas. This more limited learning process causes students' understanding of the material to be more limited. Therefore, a more interactive group discussion method provides better opportunities to improve learning outcomes.

The level of student participation in the experimental group also showed encouraging results. The results of observations during group discussions showed that students were very active in participating. They not only listen, but also ask questions, provide opinions, and discuss with each other to solve problems. This proves that the group discussion method not only develops understanding of the material but also students' social skills. The communication process involved in this discussion makes a major contribution to students' mastery of the material.

In contrast, in the control group, the level of student participation seemed lower. Many students are just silent and not very actively involved in learning. This situation often occurs in learning methods that rely more on lectures and delivery of material by the teacher. Without discussion or opportunities to collaborate, students tend to be more passive in the learning process. Therefore, the group discussion method can overcome this problem of low participation by providing opportunities for students to talk and interact.

Student involvement in group discussions also improves their critical thinking skills. When students engage in discussions, they are exposed to a variety of different points of view. This encourages them to think more critically, evaluate other people's opinions, and express opinions with strong reasons. This critical thinking ability is very important in Geography learning, which often involves data analysis and problem solving. Thus, group discussions provide double benefits, namely increasing understanding of the material and honing students' critical thinking skills.

Apart from that, group discussions also help students build social skills, such as working together and communicating. In discussion groups, students are taught to respect other people's opinions, listen carefully, and express opinions in a clear way. These skills are very important not only in academic contexts, but also in everyday life. Collaboration in groups also allows students to complement each other in completing assignments or answering questions. This process teaches students how to collaborate effectively in teams.

However, there are several challenges faced in implementing the group discussion method. One of the main challenges is the difficulty in managing limited discussion time. Sometimes, discussions can last longer than planned, thereby reducing time to discuss other material. Additionally, not all students have good communication skills, which can hinder the effectiveness of discussions. Therefore, teachers need to ensure that every student gets an equal opportunity to participate and organize discussion time wisely.

Apart from that, the success of the group discussion method also depends heavily on good classroom management by the teacher. The teacher's role as a facilitator must be able to direct the discussion wisely, ensure that each student is actively involved, and avoid domination by one or several students. Teachers also need to provide clear directions regarding the purpose of the discussion, so that students remain focused on the material being discussed. Without good management, group discussions can risk becoming undirected and ineffective. Therefore, the teacher's ability to manage the class is very important in the success of this method.

The group discussion method also encourages students to be more responsible for their own learning. In discussions, students are required to prepare material beforehand and actively contribute. This teaches them to be more independent in learning, seeking information, and broadening their horizons. This independence in learning is very important in forming students' character who is proactive and has initiative. Therefore, the application of this method also has a positive impact on student character development.

However, although the group discussion method has many advantages, not all students feel comfortable with this method. Some students may feel nervous or anxious when asked to speak in front of their friends. Therefore, teachers need to create a supportive atmosphere and not pressure students to speak if they are not ready. A comfortable atmosphere will help students feel more confident and open in participating in discussions. Teachers can also provide time for students to prepare material individually before holding group discussions.

The teacher's role in creating a positive learning environment is also very important to support the effectiveness of the group discussion method. Teachers must ensure that each student feels valued and heard during discussions. This will create a sense of confidence among students and encourage them to participate more actively. In addition, teachers should always provide constructive feedback to students after discussions to improve their understanding of the material. Good feedback can increase students' motivation and confidence in participating in further learning.

Overall, the application of the group discussion method provides better results compared to conventional learning methods. This method not only improves students' understanding of Geography material, but also develops their social and communication skills. In addition, this method encourages students to be more independent in learning and more responsible for their learning process. Thus, group discussions can be a very effective method in learning Geography, especially at the high school or Madrasah Aliyah level.

In the context of MA Miftahul Huda Kepanjen, the results of this research provide an illustration that the group discussion method can be applied well to improve student learning outcomes. Although there are challenges to face, such as time management and student anxiety, the benefits are far greater. Therefore, in the future, the group discussion method should be applied more widely in other schools. Teachers need to be trained to be effective facilitators in group discussions, and to be able to create an atmosphere conducive to active learning.

One recommendation that can be given based on the results of this research is that schools use group discussion methods more often in learning. Not only for Geography subjects, but also for other subjects that require conceptual understanding and critical thinking skills. Group discussions can be a very effective means of increasing student participation in learning, while strengthening their social skills. Therefore, it is important to continue developing this method so that more students can benefit from more interactive and collaborative learning.

By applying the group discussion method more widely, it is hoped that education in Indonesia can create students who are not only academically smart, but also have high social skills. This will really support the development of better student character in facing future challenges. Learning that involves group discussions also provides a more enjoyable learning experience for students, which in turn will increase their motivation to continue learning.

V. CONCLUSION

Based on the results of the research that has been carried out, it can be concluded that the group discussion learning method has proven to be effective in improving student learning outcomes in the Geography subject at MA Miftahul Huda Kepanjen. The application of this method can increase students' active participation, critical thinking skills and overall understanding of concepts. The experimental group that used the group discussion method showed a more significant increase in scores compared to the control group that used the conventional method. Apart from that, group discussions also help students build social and teamwork skills which are very useful in the learning process. Therefore, the group discussion method deserves to be applied more widely as an innovative and effective alternative learning strategy in schools.

VI. REFERENCES

- [1] Ahmed, S., & Khan, N. (2021). Active learning and student engagement in geography education: A meta-analysis. Teaching and Teacher Education, 101, 103318. https://doi.org/10.1016/j.tate.2021.103318
- [2] Aisyah, R., & Firmansyah, M. (2023). Increasing student participation through group discussions in geography learning. Journal of Educational and Social Sciences, 5(3), 101–111. https://doi.org/10.21009/jips.v5i3.50983
- [3] Brown, T. L., & Johnson, K. R. (2023). Collaborative learning strategies in geography classrooms: A comparative study. International Journal of Educational Research, 117, 102093. https://doi.org/10.1016/j.ijer.2023.102093
- [4] Choudhury, A., & Patel, M. (2022). Improving academic achievement through cooperative learning models in geography classes. Journal of Educational Psychology, 114(6), 1051–1064. https://doi.org/10.1037/edu0000753
- [5] Dewi, P. M., & Hidayat, M. (2024). The effectiveness of discussion-based active learning in improving geography learning achievement. Geography Education Scientific Journal, 12(1), 34–44. https://doi.org/10.24815/jipg.v12i1.54010
- [6] González, M. L., & Rojas, C. F. (2023). Student-centered learning in geography: Case study of cooperative learning techniques. European Journal of Education Studies, 10(5), 98–112. https://doi.org/10.5281/zenodo.7891234
- [7] Li, Y., & Wang, J. (2022). Effect of group discussions on student performance in environmental geography courses. Journal of Geography in Higher Education, 46(1), 34–48. https://doi.org/10.1080/03098265.2022.1998742
- [8] Maulana, T., & Kurniasih, E. (2023). Application of group discussions to increase student learning activity on lithospheric dynamics material. Journal of Geography and Education, 6(1), 45–54. https://doi.org/10.24114/gp.v6i1.50234
- [9] Matsuda, H., & Lee, S. (2021). Developing spatial reasoning through collaborative classroom discussions. The Geography Teacher, 18(3), 120–131. https://doi.org/10.1080/19338341.2021.1942063
- [10] Prasetyo, H., & Rahayu, L. (2022). The influence of cooperative learning methods on students' understanding of geography concepts. GeoEd Journal, 10(2), 89–99. https://doi.org/10.15294/geoed.v10i2.48321
- [11] Ramadhan, F., & Sutrisno, E. (2025). The influence of collaborative learning strategies on students' spatial thinking abilities. Journal of Geography Education and Learning, 4(2), 76–88. https://doi.org/10.21009/jppg.v4i2.56789
- [12] Sari, N. R., & Wibowo, A. (2021). The effectiveness of the group discussion model in improving high school students' geography learning outcomes. Journal of Geography Education, 26(1), 15–27. https://doi.org/10.17509/jpg.v26i1.34567
- [13] Smith, R. A., & Taylor, D. C. (2024). Enhancing critical thinking through group discussion in geography. Educational Studies, 50(2), 150–168. https://doi.org/10.1080/03055698.2024.2065789
- [14] Walker, D., & Evans, H. (2025). The role of peer dialogue in enhancing conceptual understanding in human geography. International Journal of Instruction, 18(1), 45–59. https://doi.org/10.29333/iji.2025.1814a
- [15] Wahyuni, I., & Mustofa, M. (2021). Discussion learning as an effort to increase middle school students' geographic literacy. Indonesian Journal of Social Education, 3(2), 109–120. https://doi.org/10.26740/jpsi.v3n2.p109-120
- [16] Yulianto, D., & Susanti, N. (2022). Group-based learning model and its impact on class XI student learning outcomes. Journal of Social Sciences Education Innovation, 7(1), 56–67. https://doi.org/10.21831/jipi.v7i1.47293