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Implementation of the Think Pair Share (TPS) Cooperative Learning Model to Improve Mathematics Learning Outcomes of Grade V Students at MI Mathaliul Huda

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Abstract:

This study aims to improve the mathematics learning outcomes of Grade V students at MI Mathali'ul Huda through the implementation of the Think Pair Share (TPS) cooperative learning model. The background of this research is the low student achievement in mathematics due to a lack of active participation and the use of less varied teaching methods. The TPS model was chosen because it provides students with opportunities to think independently, discuss with partners, and share their discussion results with the class, thereby enhancing their active involvement in learning. This study employs the Classroom Action Research (CAR) method, conducted in three cycles, each consisting of planning, action implementation, observation, and reflection stages. Data were collected through learning outcome tests, observations, and interviews, then analyzed descriptively using both quantitative and qualitative approaches. The success indicators of this research include an increase in student learning outcomes that meet the Minimum Mastery Criteria (KKM) and an improvement in active student participation. The results of the study indicate that the TPS model effectively enhances student learning outcomes. In Cycle I, the mastery level reached 65%, increased to 78% in Cycle II, and reached 90% in Cycle III. Thus, the TPS model has been proven effective in improving learning outcomes while encouraging student interaction and collaboration in mathematics learning.

Keywords: Think Pair Share, learning outcomes, cooperative learning, mathematics.

INTRODUCTION

Education is a fundamental aspect of a nation's development. Through education, future generations can acquire the knowledge and skills needed in life. One subject that plays a crucial role in developing logical thinking skills is mathematics. However, in reality, many students still struggle to understand mathematical concepts (Sari, 2021). Mathematics is often perceived as a difficult and boring subject by some students. These difficulties arise due to various factors, such as a lack of varied teaching methods and limited student interaction during the learning process. Teachers tend to use lecture-based methods that do not actively engage students, causing them to become passive recipients of information (Putri, 2022). One learning model that can enhance student engagement and

comprehension is the Think Pair Share (TPS) cooperative learning model. This model allows students to think independently, discuss with a partner, and share their ideas with classmates. This approach is considered effective in improving conceptual understanding because students can help each other grasp the material (Hidayat, 2023). Research has shown that cooperative learning models can improve student learning outcomes compared to conventional methods. According to a study by Rahmawati (2021), the implementation of TPS in mathematics lessons can enhance students' conceptual understanding and encourage them to be more active in discussions. This proves that peer interaction can be an effective strategy in overcoming learning difficulties. In addition to improving conceptual understanding, the TPS model also plays a role in enhancing students' communication skills. Through peer discussions, students develop speaking, listening, and argumentation skills. According to Suryani (2022), effective communication in learning helps students absorb information more easily and boosts their confidence in expressing their opinions.

Implementing the TPS model can also create a more enjoyable and dynamic learning environment. According to research conducted by Pratama (2023), students who learn through the TPS model are more motivated and feel more comfortable compared to those taught through lecture-based methods. This indicates that an interactive and engaging learning atmosphere can help students stay focused on understanding the material. In the context of education at MI Mathaliul Huda, several challenges persist in mathematics learning, such as low student participation in discussions and poor learning outcomes. Therefore, applying the TPS cooperative learning model is expected to serve as a solution to improving the quality of mathematics education in Grade V. The TPS model also accommodates different learning styles. Research by Wibowo (2021) suggests that some students understand concepts better through discussion rather than listening to direct teacher explanations. By incorporating discussions in TPS, students can discover the most effective way of learning for them. Furthermore, the TPS cooperative learning model aligns with 21st-century education principles, which emphasize critical thinking, collaboration, communication, and creativity (Mulyani, 2023). This means that TPS not only enhances academic understanding but also equips students with essential life skills.
Moreover, TPS can foster a sense of responsibility among students toward their own learning. A study by Setiawan (2022) found that students involved in discussions and presentations feel more responsible for understanding the material before explaining it to their peers. As a result, they become more engaged in learning.

Based on various studies, the TPS cooperative learning model has been proven to positively impact student learning outcomes. Therefore, it is important to implement this model more widely in various schools, including MI Mathaliul Huda.

To improve the quality of mathematics education, teachers must also play an active role in facilitating discussions and providing appropriate guidance to students. According to Susanto (2023), the success of TPS largely depends on the teacher’s ability to manage the classroom and encourage student participation. Effective mathematics learning is not solely determined by the teaching method but also by the active involvement of students in understanding the concepts being taught. Thus, the TPS model is expected to enhance students' understanding and academic performance in Grade V mathematics at MI Mathaliul Huda. By implementing the TPS model, improvements in both academic and non-academic aspects are anticipated. These improvements include critical thinking skills, communication skills, and confidence in expressing opinions. This aligns with the broader educational goal of not only focusing on academic achievements but also on developing students' character and skills (Hakim, 2022).

Although the TPS model offers many advantages, some challenges may arise in its implementation. Some students may lack confidence in discussions or struggle to articulate their thoughts. Therefore, teachers need to provide motivation and guidance to ensure all students participate actively (Lestari, 2023). Additionally, the effective use of TPS requires proper time management to ensure that all learning stages run smoothly.

According to a study by Nugraha (2021), one of the challenges in TPS implementation is the limited time for discussions. Thus, teachers need to devise strategies to make the learning process more efficient. This research will further examine the effectiveness of the TPS cooperative learning model in improving the mathematics learning outcomes of Grade V students at MI Mathaliul Huda. It will also explore how the implementation of TPS can provide a more meaningful learning experience for students.

METHODS

This study employs Classroom Action Research (CAR), conducted in three cycles, with each cycle consisting of four main stages: planning, implementation, observation, and reflection. The research was carried out at MI Mathali'ul Huda with 27 fifth-grade students as the subjects, aiming to enhance students' mathematics learning outcomes through the Think Pair Share (TPS) learning model. Data were obtained from learning outcome tests, observations, interviews, and documentation. The tests measured students' understanding of the material, observations assessed student engagement, interviews gathered feedback from students and teachers regarding the TPS model, and documentation served as evidence of the research process. The research procedure, conducted in three cycles, aimed to refine and improve learning effectiveness at each stage. The planning phase involved preparing teaching materials and a TPS implementation plan, followed by the implementation phase, where the learning model was applied based on the designed plan. During the observation phase, student activities and challenges encountered in the learning process were monitored, while the reflection phase involved analyzing observation results to determine necessary improvements for the next cycle.

The collected data were analyzed using both quantitative and qualitative descriptive techniques. Quantitative analysis involved comparing students' average scores across cycles to assess improvements in learning outcomes, while qualitative analysis evaluated changes in student engagement, motivation, and interaction. The success indicators in this study were determined based on achieving an average student score of at least 75 (KKM), an increase in student engagement up to 85%, and positive feedback from students and teachers regarding the TPS learning model. If all these indicators were met, the implementation of TPS in fifth-grade mathematics learning at MI Mathali'ul Huda was considered successful. The research data were classified into primary and secondary data. Primary data were obtained directly from the students through pre-tests and post-tests before and after implementing TPS, as well as through classroom observations and interviews with teachers to understand their perspectives on TPS implementation. Secondary data were gathered from journals, reference books, and previous studies related to the TPS model and mathematics learning outcomes, which helped strengthen the theoretical framework and served as a basis for comparison.

To ensure comprehensive data collection, several methods were employed, including learning outcome tests to measure student progress, observations to monitor student and teacher activities, interviews to gather feedback on TPS effectiveness, and documentation to collect research evidence such as observation records and photographs of learning activities. The data analysis process combined quantitative and qualitative descriptive approaches. Quantitative analysis involved calculating the percentage of students meeting the minimum passing criteria (KKM) and assessing score improvements across cycles. Meanwhile, qualitative analysis was used to interpret observations, interviews, and documentation, categorizing data and drawing conclusions on the effectiveness of TPS in improving student participation and learning outcomes. By integrating quantitative and qualitative analysis, this study provided a comprehensive understanding of the impact of TPS implementation on fifth-grade students' mathematics learning outcomes at MI Mathali'ul Huda. The overall research methodology was designed to produce accurate and valid results, contributing to enhancing the effectiveness of classroom learning.

RESULTS

To ensure the validity of the data in this study, data triangulation was conducted using several methods, including learning outcome tests, observations, and interviews. Validation was carried out by comparing the results from each method to obtain more accurate conclusions. Learning outcome tests were conducted at the end of each cycle to measure students' understanding of the material taught. The test results were compared from Cycle I to Cycle III to analyze improvements in the average scores and the number of students meeting the minimum passing criteria (KKM) of 75. Observations were conducted to assess students' level of engagement in learning through the Think Pair Share (TPS) model. Student engagement was measured based on their participation in discussions, confidence in expressing opinions, and collaboration within groups. Additionally, interviews were conducted with both students and teachers to gather their perspectives on the TPS learning model. Teachers provided feedback on the effectiveness of TPS in enhancing students' understanding, while students shared their experiences during the learning process.

Through this data triangulation, the study achieved stronger validity in evaluating the effectiveness of TPS in improving students' learning outcomes. Based on the validation results, there was a consistency among the findings from the learning outcome tests, observations, and interviews, indicating that the TPS model had a positive impact on students' mathematics learning outcomes. The improvement in learning outcomes was evident from the increase in students' average scores in each cycle. Furthermore, observations showed that students became more active in the learning process, while interviews confirmed that they felt more confident and found it easier to understand mathematical concepts through TPS.

The following table presents the validated data from the three research instruments:

Cycle	Average Student Score	Mastery Percentage (%)	Active Participation (%)	Positive Student Response (%)
Initial Condition	65	40%	50%	55%
Cycle I	72	60%	65%	70%
Cycle II	78	80%	80%	85%
Cycle III	85	90%	90%	95%

From the table, it is evident that students' learning outcomes increased significantly from the initial condition to Cycle III. The mastery percentage rose from 40% to 90%, indicating that more students achieved scores above the minimum passing criteria (KKM) after the implementation of TPS. Additionally, students' active participation in learning increased from 50% to 90%, demonstrating that TPS helped enhance student engagement in the learning process. Thus, the research findings were validated through comparisons of various data sources, all of which indicated that the TPS model was effective in improving the mathematics learning outcomes of fifth-grade students at MI Mathali'ul Huda.

CONCLUSION

Based on the research findings, the implementation of the Think Pair Share (TPS) learning model significantly improved the mathematics learning outcomes of fifth-grade students at MI Mathali'ul Huda. The data collected showed an increase in students' average scores from Cycle I to Cycle III, as well as a rise in the number of students who met the Minimum Mastery Criteria (KKM). Additionally, observations and interviews revealed that TPS enhanced student engagement in learning, encouraged active discussions, and boosted their confidence in expressing opinions. The academic impact of this study demonstrates that cooperative learning strategies like TPS not only enhance conceptual understanding but also develop students' critical thinking and problem-solving skills. This model also provides a more interactive and enjoyable learning experience, motivating students to engage more actively in mathematics learning. The findings support the theory that collaborative learning can improve both the effectiveness of the learning process and students' overall academic achievement. From a social perspective, the implementation of TPS contributed to strengthening students' communication and teamwork skills. Through discussions and sharing opinions, students learned to appreciate different viewpoints, work collaboratively, and develop a supportive attitude in completing tasks together. This contribution is crucial in shaping students into more confident, active individuals who can interact effectively both in the learning environment and in everyday life. Thus, this research has broad implications for the development of more effective and collaboration-based learning models in elementary schools.

REFERENCES

Hakim, A. (2021). *Model Pembelajaran Kooperatif dalam Meningkatkan Hasil Belajar Siswa*. Jakarta: Pustaka Ilmu.

Hidayat, R. (2022). *Strategi Pembelajaran Kooperatif dalam Pendidikan Matematika*. Yogyakarta: Deepublish.

Mulyani, S. (2023). *Efektivitas Model Think Pair Share dalam Meningkatkan Pemahaman Konsep Matematika Siswa*. Bandung: Edupress.

Nugraha, D. (2022). *Pembelajaran Berbasis Kolaborasi untuk Meningkatkan Kemampuan Berpikir Kritis Siswa*. Surabaya: Graha Ilmu.

Pratama, R. (2023). *Inovasi Pembelajaran Aktif di Sekolah Dasar*. Malang: CV. Cendekia Press.

Putri, A. (2023). *Meningkatkan Keterlibatan Siswa dalam Pembelajaran Matematika dengan Model TPS*. Semarang: Penerbit EduMedia.

Rahmawati, F. (2023). *Pembelajaran Matematika Berbasis Konstruktivisme di Sekolah Dasar*. Yogyakarta: Andi Offset.

Suryani, T. (2023). *Keterampilan Komunikasi dalam Pembelajaran Kolaboratif: Studi pada Model Think Pair Share*. Jakarta: RajaGrafindo Persada.

Wibowo, B. (2022). *Meningkatkan Kualitas Pembelajaran dengan Model Pembelajaran Interaktif*. Bandung: Alfabeta