Volume 4 Number 2 (2026)
July – December 2026
Page: 379-388

EDUJAVARE: International Journal of Educational Research
ISSN: 3031-2884
https://edujavare.com/index.php/edujavare
DOI: 10.70610/edujavare.v4i02.1485

Application of the Think Pair Share (TPS) Learning Model with the Help of Powerpoint Media in Social Science Learning for Grade V Students

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Article history Submitted: 2026/04/15; Revised: 2026/05/13; Accepted: 2026/07/16

Abstract

Learning is an interactive process between students, educators, and the learning environment to acquire knowledge, skills, understanding, and shape behavior changes according to learning goals. This study aims to determine the application of the Think Pair Share (TPS) learning model with the help of PowerPoint (PPT) media in science learning for fifth-grade students of SD Negeri I Pedang. This study uses a quantitative approach with the Pre-Experiment Design method and One Group Pretest-Posttest Design. The population and sample in this study amounted to 14 fifth-grade students of SD Negeri I Pedang, determined by saturated sampling techniques. Data collection techniques used include observation, interviews, documentation, and tests. Data analysis was carried out to determine student learning outcomes through calculating the average, standard deviation, normality testing using the Chi-Square test, and hypothesis testing using the T test at a significance level of 0.05. The results showed that the average pre-test score of students was 50, increasing to 81.35 in the post-test. The results of the hypothesis test obtained Thitung ≥ Ttabel (6.41 ≥ 1.77) so that Ho was rejected and Ha was accepted. Thus, it can be concluded that the application of the Think Pair Share (TPS) learning model with the assistance of PowerPoint (PPT) media in science learning for class V of SD Negeri I Pedang can be implemented well and is significantly able to achieve the Learning Objective Achievement Criteria (KKTP).

Keywords Elementary School, PowerPoint, Science Learning, Think Pair Share.

INTRODUCTION

Learning is an interactive process between students, educators, and the learning environment to acquire knowledge, skills, understanding, and shape behavior changes according to learning goals. This process uses various methods and strategies that can be applied in various environments, both formal and informal, to develop the potential of students as a whole Dafit (2023:16). Learning can also be understood as an effort made by educators to help students to gain knowledge and achieve the learning goals that have been formulated. This

activity is closely related to the quality of the learning process which is carried out in accordance with the learning resources and the applicable curriculum. One of the subjects in the curriculum that aims to improve students' knowledge is Natural and Social Sciences (IPAS).

IPAS (Natural and Social Sciences) is a subject taught in the structure of the independent curriculum. Science learning is a combination of various sciences that study living things and inanimate objects in the universe and the interactions that occur between them. In addition, IPAS also examines human life, both as individuals and as part of the community that interacts with their environment Suhelayanti et al (2023:33). The goal of IPAS itself is to foster students' interest, curiosity, and active participation, as well as develop the knowledge and skills they want to be useful for their personal and professional development. A learning model is a conceptual framework that teachers use as a guideline in designing, implementing, and evaluating the learning process in the classroom. According to Sihite & Situmorang (2024:108), it is explained that the learning model is a complete series of teaching material presentations, which include aspects before, during, and after the teaching process by teachers, as well as all facilities used both directly and indirectly in teaching and learning activities. Through the application of the right learning model, learning activities are not only teacher-centered, but also encourage active student involvement. The application of appropriate learning models not only improves the quality of learning, but also helps students develop critical thinking skills, cooperation, and responsibility in learning. One of the learning models that can help the learning process more effectively is the learning model Think Pair Share (TPS). Teachers can also use pariative learning media so that the learning process is more interesting and not boring. Learning media is any tool, material, or means that teachers use to help deliver subject matter to students. Kristanto (2016:1), explained that learning media is one of the crucial factors that contribute to improving the quality of teaching. This media functions as an intermediary between teachers and students so that the information conveyed is easier to understand, attract attention, and make the learning process less monotonous, one of which is by using media PowerPoint (PPT).

Based on the results of the observation of interviews conducted by the researcher on September 15, 2025, based on the results of the interview of the homeroom teacher of grade V of SD Negeri I Spada, it can be seen that IPAS Learning has been carried out in accordance with the Independent Curriculum, but the implementation has not been carried out optimally. Teachers are still dominant in using lecture and question and answer methods, so learning tends to be teacher-centered. Discussion activities and group work have not run optimally so that student participation in learning is still minimal. Some students are able to understand the material quickly, but others have difficulties, especially in the IPAS material. This condition causes low student activity so that the results of the study have not reached the maximum KKTP because students still consider social studies learning quite difficult because it contains many concepts that must be understood and connected to daily life. This situation shows the need for a learning model that is able to involve students in the learning process so that their understanding of the material can increase.

The Think Pair Share (TPS) learning model was chosen as an alternative to problem solving because it provides opportunities for students to think independently, discuss with their friends. To support the implementation of the Think Pair Share model, the use of PowerPoint media can help gutu in presenting material in a more interesting and easy-to-understand manner for students. Thus, the application of the Think Pair Share model with the help of PowerPoint media is expected to be able to create more active, interesting, and meaningful learning so that student learning outcomes can reach the KKTP that has been set. This is evidenced by research conducted by Maulida, R.I., & Hendratno (2025) "The Effect of the Interactive PowerPoint Assisted Think Pair Share Cooperative Learning Model on the Learning Outcomes of Indonesian Nonfiction Texts, with the result that there is an improvement in the learning process before and after being given treatment.

Based on the above problems, the researcher is interested in researching with the title Implementation of the Cooperative Learning Model Think Pair Share (TPS) With the help of the media PowerPoint (PPT) In the learning of social studies for grade V students of SD Negeri I Pedang. This study aims to determine the application of the TPS learning model with the help of PPT media in science learning for fifth-grade students of SD Negeri I Pedang.

METHODS

This study uses a quantitative approach with the Pre-Experiment Design that is, an experiment that uses only one class with no comparative class. The design used in this study is One Group pretest-Posttest Design (Jakni, 2016:12). This research was carried out in grade V at SD Negeri 1 Pedang which is located in Pedang Village, Muara Beliti District, Musi Rawas Regency. The time is carried out in the even semester of the 2025/2026 academic year. The population of this study is all grade V students of SD Negeri 1 Pedang consisting of 14 students with a total of 5 male students and 9 female students, because the population is relatively small, the sampling technique used is a saturated sampling technique. The data collection techniques used in this study include observation, interviews, documentation, and tests. The test instrument was used in the form of multiple-choice questions that were first tested for validity and reliability. Based on the results of the instrument test, 13 questions were obtained that were categorized as valid to be used in the implementation of the pre-test and post-test.

The data analysis technique was carried out quantitatively using the T test and the chi-square test (X2). This test was used to analyze the null hypothesis (Ho) and the alternative hypothesis (Ha), with the hypothesis testing criteria of Tcal ≥ Ttabel, then Ho was rejected and Ha was accepted. On the other hand, if Tcount < Ttabl, then Ha was rejected and Ho was accepted with a significant degree a = 0.05 and degrees of freedom (dk = n-1).

FINDINGS AND DISCUSSION

Findings

This research was conducted at SD Negeri 1 Pedang on 14 grade V students. The implementation of the research was carried out through four meetings which included one Pre-test, twice treatment by applying the learning model Think Pair Share (TPS) with the help of the media PowerPoint (PPT), and one time post-test.

Before being given treatment, students first take a pre-test to find out the students' initial ability in the Natural Resources Type material. After that, learning was carried out by applying the TPS learning model assisted by PPT in two meetings. In the final stage, students are given a post-test to find out their final ability after receiving treatment.

a. Description of Student Initial Test Data (Pre-test)

The implementation of this research began by carrying out Pre-test to find out the initial learning outcomes of students on the Types of Natural Resources (SDA) material, before the learning model is given TPS Based PPT. Questions in the form of multiple choice 13 questions for grade V students to work on.the following is the data of the calculation results in the early stages of students (Pre-test).

Based on the results of the initial test calculation (Pre-test), obtained an average student score of 50. Of the 14 students who took the test, only 1 student (7%) obtained a score above the KKTP which was 68, while the other 13 students (93%) were still below the KKTP. These results show that students' initial ability in social studies learning is still relatively low, so a learning model is needed that can improve student learning outcomes. To solve this problem, the researcher carried out the treatment in the first and second treatments, learning was maximized and student learning outcomes were achieved.

b. Final Test Data (Post-Test)

Based on results Post-test After being given treatment, it is carried out post-test using 13 multiple-choice questions. Based on the results of the calculation, the average student score was 81.35, the highest score was 92 and the lowest score was 69. All students (100%) obtained a score above the KKTP which was 68. This shows that there is a change in student learning outcomes after the implementation of the learning model Think Pair Share (TPS) with media assistance PowerPoint. The data can be seen in the following graph table:

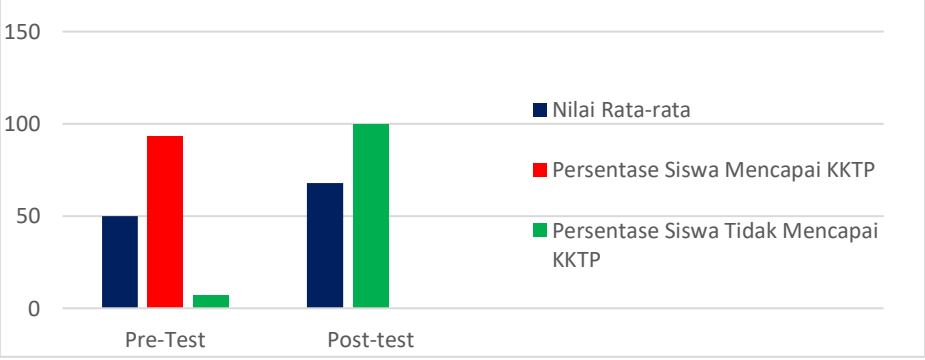

Figure 1. Pre-test-Post-test Value

c. Normality Test Results

The Normality Test is carried out to find out whether the post-test results are distributed normally or not. The test was performed using the Chi-Square test (X2). Based on the results of the calculation, it is known that the value of the X^2_{Count} (3,7442) < X^2_{Table} (9,488) (X^2_{Count} < X^2_{Table}). Thus the data post-test It is declared to be normally distributed with a significant level of α = 0.5.

d. Uji Hypothesis

Based on the results of the hypothesis test calculation data, it was obtained that T_{hitung} (6.41) ≥ T_{tabel} (1.77), then Ho was rejected and Ha was accepted. Thus, the hypothesis in this study can be accepted as true, so it can be concluded that "The Learning Outcomes of Natural and Social Sciences of Class V Students of SD Negeri 1 Pedang after applying the PowerPoint-assisted Think Pair Share (TPS) learning model (PPT) have successfully achieved KKTP.

Based on the results of research that has been conducted on grade V students of SD Negeri I Pedang, it can be seen that the application of the learning model Think Pair Share (TPS) with the media PowerPoint (PPT) has a positive influence on students' social studies learning outcomes. In this study, the learning outcomes measured were the cognitive domain. According to Sulistio & Haryanti (2022:48), it is explained that the learning model Think Pair Share is one of the learning models that can provide time for them or students to be able to think critically either individually or in groups or in pairs. This research was carried out through four meetings consisting of one Pre-test, twice treatment (Treatment), and one time post-test. In the initial stage, the researcher conducted an instrument test of questions in class VI and obtained 13 valid questions out of 20 multiple-choice questions to be used in class V to be studied. The first stage begins with Pre-test to find out the students' initial abilities before the model is applied Think Pair Share Help PowerPoint. Results Pre-test shows that the average student score is only 50, where there is 1 student (7%) who has achieved the KKTP score and 13 students (93%) have not achieved the KKTP. This shows that students' initial ability in the material types of natural resources is still relatively low. The second stage is carried out by applying treatment, namely using a model Think Pair Share Media-based PowerPoint in the learning process in two meetings. At the first meeting, students still experienced confusion in participating in learning. However, through the briefings and explanations provided by the researcher, students began to understand the learning flow and showed the courage to ask questions and participate in discussions. In the second meeting, the learning process took place better, students seemed more active, able to work together with their group partners, and more confident in conveying the results of the discussion in front of the class. The third stage is carried out by giving post-test to find out the final ability of the student after receiving treatment. Results post-test showing a significant increase in learning outcomes, the average score of students is 81.35. All students who have achieved a score above the KKTP are 68.

Furthermore, the results of the normality test showed that the data post-test Normal distribution due to the X2Count by 3.7442 < X2 Ttable by 9,488. This shows that the data from the research results are eligible for hypothesis testing. Based on the hypothesis test using the T test, the Tcal value was obtained as 6.41, while the Ttable was 1.64. Because Tcal ≥ T_{Table} (6.41 ≥ 1.77), then the alternative hypothesis Ho is rejected and Ha is accepted. Overall application of the learning model Think Pair Share media-assisted PowerPoint able to create a more active, interactive, and meaningful learning atmosphere. Through the stages of thinking independently (Think), discuss (Pair), and share the results of the discussion (Share), students become more involved in the learning process so that students' social studies learning outcomes increase. Therefore, it can be stated that the application of the learning model Think Pair Share media-assisted PowerPoint effectively used in learning so that students better understand the material so that student learning outcomes are significant to achieve the set KKTP.

The findings of this study demonstrate that the implementation of the Think Pair Share (TPS) learning model assisted by PowerPoint media significantly improved the learning outcomes of fifth-grade elementary school students in Natural and Social Sciences (IPAS). This improvement is evidenced by the increase in the average score from 50.00 in the pre-test to 81.35 in the post-test, with all students successfully achieving the Minimum Learning Achievement Criteria (KKTP). Furthermore, the hypothesis testing results confirmed that the calculated T value (6.41) exceeded the critical value (1.64), indicating that the treatment had a statistically significant effect on students' learning outcomes. These findings suggest that integrating cooperative learning strategies with interactive digital media creates a learning environment that supports conceptual understanding more effectively than conventional teacher-centered instruction.

The substantial improvement in students' achievement can be explained through the fundamental principles of the constructivist learning theory, which argues that knowledge is actively constructed through interaction, collaboration, and reflection rather than passively received from teachers. According to constructivist perspectives proposed by Vygotsky, learning becomes more meaningful when students engage in social interaction within their Zone of Proximal Development (ZPD). In the TPS model, students first organize their own understanding individually during the "Think" stage, refine their ideas through peer discussion in the "Pair" stage, and finally strengthen conceptual mastery by communicating their understanding during the "Share" stage. These sequential learning activities encourage cognitive restructuring and deeper information processing, enabling students to connect prior knowledge with newly acquired concepts. Consequently, students do not merely memorize scientific concepts but develop meaningful understanding through collaborative reasoning and verbal articulation (Zhang et al., 2023; Chen & Hwang, 2024).

The effectiveness of TPS in this study is also consistent with the principles of Social Interdependence Theory, which explains that positive interdependence among learners promotes higher achievement because students perceive that their success depends on mutual

cooperation. During classroom implementation, students were encouraged to exchange ideas, provide explanations, evaluate different viewpoints, and solve learning problems collaboratively. Such interactions enhanced not only academic achievement but also communication skills, confidence, and active participation throughout the learning process. This finding supports Johnson and Johnson's cooperative learning theory, which emphasizes that structured peer interaction stimulates higher-order thinking and increases learning responsibility among students. The collaborative atmosphere observed during the second treatment session indicates that repeated engagement in cooperative learning gradually builds students' confidence and collaborative competence, leading to sustained academic improvement (Li et al., 2024).

The use of PowerPoint media also played a substantial role in reinforcing the effectiveness of the TPS model. Multimedia learning theory proposed by Mayer explains that students learn more effectively when verbal explanations are integrated with relevant visual representations because dual-channel information processing reduces cognitive overload while improving retention. The visual support enabled students to engage more actively during pair discussions because they shared common visual references that stimulated questioning and collaborative reasoning. Consequently, PowerPoint functioned not merely as a presentation tool but as a cognitive scaffold that enhanced students' understanding during each TPS learning phase (Mayer, 2021; Wang et al., 2024). The transition from passive listening to active participation explains why students demonstrated remarkable improvement in post-test performance despite receiving only two treatment sessions. This finding suggests that learning outcomes are strongly influenced not only by instructional content but also by the quality of learning interactions that occur during classroom activities (Fredricks et al., 2023; Bond & Bedenlier, 2024). For instance, Maulida and Hendratno (2025) reported that interactive PowerPoint-assisted TPS significantly improved Indonesian language learning outcomes by increasing students' participation and collaborative engagement. Similarly, Rahman et al. (2023) found that TPS enhanced elementary students' conceptual understanding and critical thinking because the structured discussion process encouraged learners to construct explanations collaboratively rather than relying solely on teacher instruction. Likewise, Suryani et al. (2024) concluded that cooperative learning models integrated with multimedia significantly improved students' academic performance compared with conventional classroom practices.

Nevertheless, this study also reveals several distinctive characteristics compared with previous research. Most earlier studies investigated TPS as an independent instructional strategy, whereas the present research combined TPS with digital presentation media. This integration appears to produce additional learning benefits because multimedia resources facilitate visualization, maintain students' attention, and support collaborative dialogue. Moreover, while previous studies frequently focused on secondary education or large classroom settings, this research demonstrates that TPS remains highly effective even in small elementary classrooms consisting of only fourteen students. This finding suggests that

cooperative learning effectiveness is determined more by the quality of instructional design than by classroom size, thereby extending previous theoretical assumptions regarding cooperative learning implementation in primary education.

From a broader educational perspective, these findings contribute to the growing body of literature emphasizing that effective learning in the twenty-first century requires integrating student-centered pedagogy with digital instructional media. Contemporary educational theories argue that future classrooms should promote collaboration, communication, creativity, and critical thinking rather than memorization. TPS supported by PowerPoint aligns closely with these educational goals because students actively construct knowledge while simultaneously utilizing digital learning resources that enhance conceptual understanding. Consequently, the instructional approach implemented in this study contributes not only to improved cognitive achievement but also to the development of essential competencies required in modern education (Oecd, 2023; Unesco, 2024).

Despite these promising findings, several limitations should be acknowledged. The study employed a pre-experimental one-group pretest-posttest design without a control group, making it difficult to eliminate external influences entirely. Furthermore, the relatively small sample size limits the generalizability of the findings to broader educational populations. Future studies should employ quasi-experimental or randomized controlled designs involving larger and more diverse samples to validate these findings across different schools and educational settings. In addition, future research may investigate the long-term effects of TPS-assisted multimedia instruction on higher-order thinking skills, creativity, scientific literacy, collaborative competence, and learning motivation.

CONCLUSION

Based on the results of the research that has been conducted, it can be concluded that the application of the learning model Think Pair Share (TPS) with the help of the media PowerPoint able to improve the learning outcomes of IPAS students in grade V of SD Negeri I Pedang. The results of the analysis show that the average value Pre-test 50 students with a KKTP of 68, out of 14 students there is 1 student with a score above 68 (Achieving KKTP). After being given treatment through the application of the learning model Think Pair Share, average value Post-test to 81.35 with the number of students who achieved KKTP as many as 14 students who achieved scores above 68. The results of the hypothesis test used the T-test which showed that Tcal ≥ Ttable (6.41 ≥ 1.77), so that Ho was rejected and Ha was accepted. Thus the learning model Think Pair Share with the help of the media PowerPoint significantly able to achieve KKTP.

Future studies are therefore recommended to employ quasi-experimental or true experimental designs involving larger and more diverse samples across different schools and regions. Further research should also investigate the long-term effects of TPS-assisted multimedia learning on higher-order thinking skills, scientific literacy, collaboration skills, creativity, learning motivation, and digital competence. Moreover, future researchers are

encouraged to compare various digital learning media, such as interactive PowerPoint, learning management systems, augmented reality, or artificial intelligence-supported instructional platforms, to identify the most effective technological integration for enhancing elementary science learning in diverse educational settings.

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