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The Effect of the Treasure Hunt Game Integrated with Think Pair Share Model on Student Activity and Math Learning Outcomes in Fourth Grade

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ABSTRACT

This research investigates the influence of a treasure hunt game combined with the Think Pair Share (TPS) learning model on student engagement and mathematics achievement among fourth-grade students at NU Kaplongan Elementary School. The study employed a true experimental design using a pretest–posttest control group approach. The population comprised all fourth-grade students in the 2024/2025 academic year, with participants selected through random sampling. Research instruments consisted of a mathematics achievement test and a student activity questionnaire. Data were analysed using an independent sample t-test to determine differences between the experimental and control groups. Findings revealed a statistically significant improvement in learning outcomes and student activity for the experimental group compared to the control group ($t = 2.114$, $p = 0.03 < 0.05$; $t = 3.453$, $p = 0.00 < 0.05$). These results support the acceptance of the alternative hypothesis (Ha), indicating that integrating the treasure hunt game with the TPS model effectively enhances mathematics learning at the elementary level. Consequently, this approach is recommended as an innovative strategy combining educational games with collaborative learning to foster active participation and improved academic performance.

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1. INTRODUCTION

Education is one of the important aspects of human life that plays an important role in character formation, developing knowledge, and the mentality of a child who will later grow into an influential adult in his environment [1], [2]. One of the subjects that students must master in formal and non-formal education is mathematics [3], [4]. This science has a definite nature; mathematics is a language. Mathematics not only helps in problem solving but also serves as a tool for accurate and clear communication in conveying ideas [5].

Although many view mathematics as a fairly complicated subject, with effort and patience, it can certainly be understood well. Students who initially find mathematics difficult can improve their understanding with high enthusiasm during the learning process [6], [7], [8], [9], [10], [11].

However, numerous challenges persist in mathematics education at SD NU Kaplongan. According to interviews with mathematics teachers, these challenges include limited student engagement in the learning process, ongoing difficulties in understanding the taught material, and suboptimal student mathematics learning outcomes.

Based on the interview, the problem focuses on improving student activity and learning outcomes as optimally as possible. To support this, a pleasant and conducive learning atmosphere is created using the treasure hunt game technique based on the think-pair-share learning model, because the previous learning method was still monotonous, namely only the lecture method without any innovation, so it has not made students actively involved in the learning process. Therefore, it is necessary to add learning methods to improve student activity and learning outcomes.

The treasure hunt game technique, grounded in the think-pair-share learning model, was selected to tackle this problem due to its potential to optimise student engagement, activity, and academic achievement in both cooperative and individual settings [12], [13], [14], [15], [16].

Players play a Treasure hunt game to find and collect items such as coins, metals, etc. This game requires students to search for treasure actively, and the purpose of this learning is to find answers through the clues given. This game can be played anywhere and by anyone, so if applied to the learning process, it can be played outside the classroom. Students avoid boredom when studying indoors and find an answer regarding learning [17], [18].

This technique is combined with the think-pair-share (TPS) learning model because this model is considered capable of optimising student involvement and student activity in working together or working individually, all of which require mathematical communication skills. With this learning, students can become more active and involved in learning activities [19], [16], [20]. Think-pair-share is a cooperative learning model that involves students working in pairs to solve problems through three steps: think, pair, and share [21], [22], [23].

Several studies have been conducted related to the implementation of treasure hunt games, including: research by Cahyani et al. in 2019 entitled "The Effect of Treasure Hunt Game Technique Based on Think Pair Share Model on Mathematics Learning Outcomes of Class III Students" which states that "There is a difference in learning outcomes between groups of students with treasure hunt and group work with significance analysis results (20.30> 2.101) then Ho is rejected and Ha is accepted" [17]. Furthermore, research by Lubis et al. in 2019 entitled "The Effect of Think Pair Share Learning Model Using Mind Mapping Media on Student Activity and Cognitive Learning Outcomes" states that "There is a significant effect on student activity and cognitive learning outcomes (Sig value 0.000 < 0.05 and sig 0.000 < 0.05)" [24]. These two studies clearly demonstrate that both the treasure hunt technique and the Think Pair Share model have potential to increase student

achievement and activity in mathematics learning, especially when supported by additional media such as mind mapping. The difference between this study and previous research lies in grade level, research focus, and variables studied. In other words, although the underlying learning models and techniques are similar, the contexts in which they are applied show meaningful distinctions that justify further investigation. Thus, this study differs from previous research because it can contribute differently to developing science and educational practice. Previous research can provide useful guidance to determine the differences from the current study.

The differences between this study and previous research lie in grade level, research focus, and variables studied. Such distinctions highlight the importance of contextual factors, since every level of education may present different challenges and outcomes when innovative methods are applied. Each school has unique challenges in learning, which encourages researchers to conduct this study. Building upon these gaps, the present study seeks not only to validate prior findings but also to explore whether similar approaches are equally effective in a different educational setting. This study will investigate the following questions: 1) Does the treasure hunt game technique based on the think-pair-share learning model affect student learning outcomes?; 2) Does the treasure hunt game technique based on the think-pair-share learning model affect student activity?; 3) Can the treasure hunt game technique based on the think-pair-share learning model improve student learning outcomes?.

2. METHOD

This study used a quantitative approach with a true experimental method [25], [26]. The research was carried out at SD NU Kaplongan, located at Jl. Raya Kaplongan No. 28, Karangampel District, Indramayu Regency. This study's population consisted of all SD NU Kaplongan students, totalling 385 students. The sample consisted of two classes, namely class IV-B with 32 students and class IV-A with 31 students. The selection of these two classes was intended to represent the overall population while maintaining manageability in terms of observation and data collection.

The research design used in this study was a pretest-posttest control group design, which involves two research participants: an experimental group receiving treatment and a control group without treatment [25]. This design was chosen because it allows researchers to measure the effectiveness of an intervention by comparing initial conditions (pretest) with final outcomes (posttest), thereby providing more reliable evidence of causality. The sample was selected using a probability sampling method, specifically a random technique [25], [26]. Class IV-B served as the experimental group that received treatment, while Class IV-A was the control group that functioned as a comparison group receiving conventional learning. Such a grouping ensured that differences in results could be attributed more confidently to the applied treatment rather than to external factors. Both groups were given the same research instruments: a pretest and a posttest. The pretest was administered to the control group in class IV-A and the experimental group in class IV-B to ensure the students' initial ability and the sample's homogeneity. By establishing baseline data, the researcher ensured that any subsequent improvement could be attributed

to the intervention rather than pre-existing differences between groups. At the same time, the posttest was given to determine the difference in students' learning outcomes due to applying the treasure hunt game technique based on the think-pair-share learning model by comparing the posttest scores of the experimental and control groups. In this way, the research design allowed for a systematic evaluation of whether the integration of the treasure hunt game with the TPS model significantly influenced student learning outcomes. The research design is presented in Table 1 below.

Table 1. Pretest-posttest control group design

Class	Pretest	Treatment	Postest
Exsperiment	0_1	X	0_2
Kontrol	0_3	-	0_4

The data collection techniques used in this study were essay tests and questionnaires. The essay test consisted of 10 items and was used to measure student learning outcomes, while the questionnaire consisted of 15 statements corresponding to activity indicators and was used to collect data on student activity. These two instruments were deliberately chosen to provide complementary perspectives: the essay test captured students' cognitive achievements in mathematics, while the questionnaire provided insights into their behavioural engagement during the learning process. The data analysis used to test the first and second hypotheses employed an independent samples t-test. This statistical method was considered appropriate because it enables comparison of the mean scores between the experimental and control groups, thus determining whether any observed differences were statistically significant. Meanwhile, an N-gain test was used to test the third hypothesis. The N-gain test was particularly useful for evaluating the magnitude of improvement in learning outcomes, thereby offering a more nuanced picture of the effectiveness of the intervention beyond simple score differences. The data analysis was conducted using SPSS 22.0 for Windows software. This software was selected because of its reliability and ability to handle complex statistical procedures with accuracy and efficiency. Before hypothesis testing, prerequisite tests were performed on the variables studied, namely learning outcomes and student activity, including normality and homogeneity tests. These prerequisite tests ensured that the data met the assumptions required for parametric analysis, which is crucial for maintaining the validity of the statistical inferences drawn. These analyses used a significance level of 0.05 (α = 5%) between the independent and dependent variables. By setting this standard threshold, the researchers ensured that the acceptance or rejection of hypotheses was based on widely accepted statistical criteria, thereby strengthening the credibility of the findings [25].

3. RESULTS AND DISCUSSION

This study was carried out at Nahdlatul Ulama Kaplongan Elementary School, located in Karangampel District, Indramayu Regency, between September 14 and 23, 2024. The chosen time frame ensured that the research could be conducted intensively within a manageable period, allowing the researcher to control variables and minimise

external disruptions to the learning process. The analysis of the data involved conducting normality tests, homogeneity tests, and hypothesis testing, all performed using SPSS 22.0 for Windows software. The sequence of these analyses was crucial: normality tests were conducted first to verify that the distribution of data followed statistical assumptions, homogeneity tests were then applied to confirm the consistency of variance across groups, and finally hypothesis testing was carried out to evaluate the research questions. By utilising SPSS 22.0, the researcher ensured that all statistical procedures were executed with high precision, thereby enhancing the reliability and validity of the study's conclusions..

3.1. Results

In this study, the normality test was conducted using the Kolmogorov–Smirnov test. The results of the normality test are presented in Table 2, which shows the normality test for learning outcomes, and in Table 3, which shows the normality test for activity.

The use of this test was intended to ensure that the distribution of the data followed a normal pattern, which is a fundamental requirement for applying further parametric statistical analyses.

Table 2. Normality Test Results of Learning Outcomes

	Kolmogorov-Smirnov		
Class	Statistic	df	Sig
Control Pretest	0,147	31	0,075
Control Posttest	0,119	31	0,200
Experiment Pretest	0,153	32	0,064
Experiment Posttest	0,148	32	0,081

As shown in Table 2, the control group had a pretest score of 0.075 and a posttest score of 0.200, while the experimental group had a pretest score of 0.064 and a posttest score of 0.081. The results of the normality test showed that the significance value was above 0.05, which confirms that the data on learning outcomes followed a normal distribution and satisfied the necessary conditions for further parametric analysis. Thus, the learning outcome data could be analysed using more advanced statistical tests without violating underlying assumptions.

Table 3. Normality Test Results of Activity

	Kolmogorov-Smirnov		
Class	Statistic	df	Sig
Control Pretest	0,128	31	0,200
Control Posttest	0,140	31	0,127
Experiment Pretest	0,141	32	0,200
Experiment Posttest	0,130	32	0,184

As presented in Table 3, the control group had a pretest score of 0.200 and a posttest score of 0.127, whereas the experimental group had a pretest score of 0.200 and a posttest score of 0.184. The normality test showed a significance value higher than 0.05,

which means the data from the activity followed a normal distribution. This finding further strengthens the reliability of the dataset, since both learning outcomes and activity data met the assumption of normality.

Afterward, a homogeneity test was conducted using Levene's test. The rule used was that if the significance value is above 0.05, it suggests that the variance is the same across the different sample groups, meaning the variances are homogeneous. However, if the significance value is below 0.05, it indicates that the variances are not the same, meaning the variances are heterogeneous. This finding further strengthens the reliability of the dataset, since both learning outcomes and activity data met the assumption of normality. The outcomes of this test are detailed in Table 4.

Table 4. Homogeneity Test Result

	Levene Statistic	df1	df2	Sig
Learning Outcomes	0,022	1	61	0,882
Activity	0,522	1	61	0,473

Table 4 shows that the homogeneity test for learning outcomes had a significance value of 0.882, which is greater than 0.05, and the homogeneity test for student activity had a significance value of 0.473, also greater than 0.05. These results indicate that the variances in the sample are statistically similar or consistent. Because both the normality and homogeneity conditions were satisfied, hypothesis testing was carried out using the independent sample t-test in SPSS version 22 for Windows. The decision rules were as follows: if the calculated t-value (tcount) is higher than the critical t-value (ttable), the alternative hypothesis (Ha) is accepted; however, if tcount is lower than ttable, the null hypothesis (Ho) is accepted. Additionally, if the significance value is less than 0.05, Ha is accepted, but if it is higher than 0.05, Ho is accepted, with the significance level set at $\alpha = 0.05$ (5%) [25]. This procedure allowed the researcher to determine with statistical rigor whether the intervention had a meaningful effect on learning outcomes and student activity.

Table 5. Hypothesis Test Results of Learning Outcomes

Independent Sample Test			
	t	df	Sig (2-tailed)
Equal variances assumed	2,114	61	< 0,039
Equal variances not assumed	2,107	57,825	< 0,039

Based on Table 5, the calculated t-value (tcount) of 2.114 is higher than the critical t-value (ttable) of 1.998. Additionally, the significance value (sig, 2-tailed) of 0.039 is less than the standard threshold of 0.05. According to the decision rules, if the calculated t-value exceeds the critical t-value and the significance value is below 0.05, the alternative hypothesis (Ha) is accepted. This result indicates that the use of the treasure hunt game technique along with the think–pair–share learning model has a statistically significant impact on the mathematics learning outcomes of fourth-grade students at SD NU

Kaplongan. Therefore, the intervention proved effective in improving academic achievement compared to conventional teaching methods.

Table 6. Hypothesis Test Results of Activity

Independent Sample Test			
	t	df	Sig (2-tailed)
Equal variances assumed	3,453	61	< 0,001
Equal variances not assumed	3,440	57,051	< 0,001

Referring to Table 6, the calculated t-value (tcount) of 3.453 is higher than the critical t-value (ttable) of 1.998. Additionally, the significance value (sig, 2-tailed) of 0.001 is less than 0.05. Based on the testing criteria—where the calculated t-value is greater than the critical t-value and the significance value is below 0.05—the alternative hypothesis (Ha) is accepted. These findings show that the treasure hunt game technique, combined with the think–pair–share learning model, has a statistically significant effect on the mathematics learning activities of fourth-grade students at SD NU Kaplongan. This means the intervention was not only effective for cognitive outcomes but also in fostering active participation and engagement.

The normalised gain test was used to analyse the application of the Think Pair Share-based treasure hunt game technique in improving learning outcomes. The normalised gain test was used to analyse the application of the Think Pair Share-based treasure hunt game technique in improving learning outcomes. The n-gain test can be seen in Table 7.

Table 7. N-Gain Test Results

Class		Min	Max	Mean	N-gian	Interpretasi
Control	Pretes	18	87	63,90	0,01	Low
	Postes	0	81	64,48		
Experiment	Pretes	37	87	62,53	0,33	Medium
	Postes	52	93	74,93		

As shown in Table 7, the experimental group had an average pretest score of 62.53, with the highest score being 87, and an average posttest score of 74.93, with the highest score reaching 93. This indicates an improvement of 12.40%. The N-gain analysis showed a value of 0.33, which is below 0.70, meaning the improvement in learning outcomes falls into the “moderate” category. According to the learning achievement criteria for grade IV at SD NU Kaplongan, a score of 70 or higher is considered passing. After the intervention, 22 students (68.75%) in the experimental group achieved passing scores, compared to only eight students (25%) before the treatment, showing an increase of 14 students (43.75%). This improvement highlights the practical significance of the intervention, as more students were able to reach the minimum mastery level after the treatment.

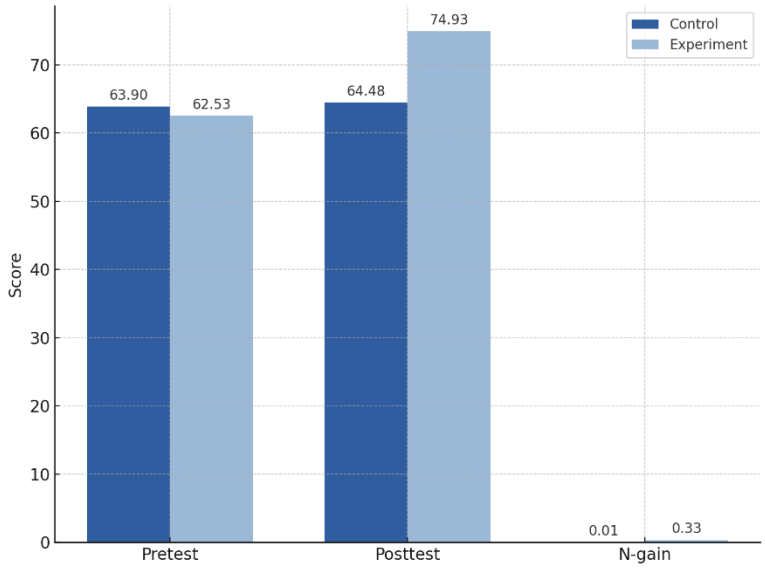

Figure 1. Comparison of Learning Outcomes: Control Class and Experimental Class

In contrast, the control group achieved an N-gain score of 0.01 (< 0.30), indicating a "low" category of improvement in learning outcomes. These findings suggest that, quantitatively, the average post-intervention learning outcomes in the experimental group were notably higher than their pre-intervention scores and those of the control group. A visual comparison of these results is illustrated in Figure 1. Overall, the data analysis strongly supports the conclusion that integrating the treasure hunt game with the think–pair–share model produces measurable improvements in both academic outcomes and student activity.

3.2. Discussion

This study was conducted on experimental and control groups in two learning sessions. The first session involved administering pretest essay tests and questionnaires to measure students' learning outcomes and activity at the beginning, while the second session was dedicated to administering posttest essay tests and questionnaires after each learning intervention was applied. The pretest phase established the level of learning outcomes and initial activity of students before applying the treasure hunt game technique based on the learning model in the experimental class and conventional teaching methods in the control class. This sequential design ensured a controlled comparison between the two learning approaches.

In the first session, the pretest results showed that the control group had an average learning outcome score of 63.90, while the experimental group achieved a slightly lower average score of 62.53. Additionally, the pretest results for student activity scores in the control class averaged 64.77, while the experimental group averaged 62.93. These comparable scores indicate that both groups were relatively homogeneous regarding initial learning outcomes, and no significant differences were observed before the intervention. This baseline equivalence is crucial for attributing subsequent outcome differences to the treatment, rather than pre-existing disparities.

The treatment phase involved the application of the treasure hunt game technique based on the think-pair-share learning model, utilising the material "Whole Number Operations: Addition and Subtraction" as found in Bupena Chapter 2, Volume 4a of the Merdeka Curriculum. In contrast, the control group continued with traditional lecture-based learning, supported by textbooks and teacher-centred instruction, without any enhanced intervention with media. The difference between these two learning modalities served as the basis for evaluating the impact of integrating the technique and model on student learning outcomes and activity [27], [16], [17], [20].

Using the treasure hunt game technique based on the think-pair-share learning model in the experimental group created a more dynamic and interactive classroom atmosphere, thereby increasing student engagement and active participation in the learning process. This is supported by research conducted by Cahyani et al. [17], Indra et al. [20], and Simanungkalit et al.[28], This shows that using the treasure hunt game technique based on the think-pair-share learning model can increase class engagement and promote independent learning. Initial observations showed that the technique and learning model positively impacted students' affective learning behaviours, such as enthusiasm, attention, and active participation. In contrast, the control group lacked motivation, focus, and active participation in learning activities.

After the learning phase, both groups were administered posttest essay tests and questionnaires. The average score of the control group's essay test increased slightly to 64.48, while the experimental group showed a substantial increase, with an average score of 74.93 and scores ranging from 52 to 93. Additionally, the average score of the control group's activity questionnaire increased slightly to 66.77, while the experimental group showed a substantial increase, with an average score of 75.37.

These results indicate that students who used the treasure hunt game technique based on the think-pair-share learning model experienced a significant improvement in both learning outcomes and student activity compared to students in conventional learning.

4. CONCLUSION

The results of this research indicate that implementing the treasure hunt game technique within the think-pair-share learning model provides a notable and positive influence on the learning outcomes and participation of fourth-grade students at SD NU Kaplongan, especially in mathematics related to whole number operations (addition and subtraction). This influence is reflected in the improvement of the average learning outcome scores, which rose from 62.53 before the intervention to 74.93 after applying the treasure hunt game combined with the think-pair-share model. Similarly, the average student activity scores increased from 62.93 prior to the intervention to 75.37 following its application.

The statistical analysis further strengthens these findings, as the independent sample t-test demonstrated a significant difference in both learning outcomes and student activity between the experimental and control groups ($t = 2.114$, $p = 0.03 < 0.05$; and $t = 3.453$, $p = 0.00 < 0.05$). These results confirm the proposed hypothesis that integrating the

treasure hunt game with the think-pair-share (TPS) model can effectively enhance mathematics learning in elementary school contexts.

Beyond the quantitative findings, this study also highlights the pedagogical potential of the treasure hunt game technique based on the think-pair-share model as an engaging and student-centred teaching tool. As supported by previous research by Riantika et al [16] and Cahyani et al [17], interactive and game-based learning formats can promote increased student activity. Based on these findings, educators should integrate game-based and collaborative learning techniques, such as the treasure hunt game based on the think-pair-share model, into their teaching strategies to create a more active learning environment and enhance student engagement and learning outcomes.

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REFERENCES

[1] R. Rasilah, "Penerapan Assesmen Proyek untuk Meningkatkan Representasi dan Menggurangi Kecemasan Siswa," *Gema Wiralodra*, vol. 10, no. 1, pp. 115–129, Apr. 2019, doi: 10.31943/gemawiralodra.v10i1.15.

[2] N. R. F. Kanza, A. D. Lesmono, and H. M. Widodo, "Analisis Keaktifan Belajar Siswa Menggunakan Model Project Based Learning dengan Pendekatan STEM Pada Pembelajaran Fisika Materi Elastisitas di Kelas XI MIPA 5 SMA Negeri 2 Jember," *Jurnal Pembelajaran Fisika*, vol. 9, no. 2, p. 71, Jun. 2020, doi: 10.19184/jpf.v9i1.17955.

[3] A. Muchyidin, R. Rasilah, Z. Candelario-Aplaon, and M. Hayat, "Analysis of Student Errors Future Mathematics Teachers in Solving Complex Analysis Problems ," *Math Didactic: Jurnal Pendidikan Matematika*, vol. 10, no. 2, pp. 250–266, 2024.

[4] M. Mariono, A. Nurhalimah, M. Mahsup, V. Mandailina, S. Syaharuddin, and A. Abdillah, "Ekperimen pembelajaran matematika dengan strategi Teams Games Tournament dan Think Pair Share terhadap keaktifan siswa belajar matematika," in *Seminar Nasional Paedagoria III* , Mataram: Universitas Mataram, 2023.

[5] N. Nufus, "Pengaruh Model Pembelajaran Kooperatif Tipe Think Pair Share terhadap Kemampuan Komunikasi Matematika Siswa Kelas VIII SMPN 21 Mataram Tahun Ajaran 2021/2022," *Jurnal Riset Pendidikan Matematika Jakarta*, vol. 4, no. 2, pp. 35–42, Aug. 2022, doi: 10.21009/jrpmj.v4i2.25085.

[6] B. Sadipun, "Penerapan Model Pembelajaran Kooperatif Tipe Think Pair Share untuk Meningkatkan Prestasi Belajar IPS Siswa Kelas V SDI Ende 14," *Inteligensi : Jurnal Ilmu Pendidikan*, vol. 3, no. 1, pp. 11–16, Jun. 2020, doi: 10.33366/ilg.v3i1.1461.

[7] S. Rivai and F. D. Mohamad, "Pengaruh Penggunaan Model Pembelajaran Think Pair Share Pada Terhadap Hasil Belajar Siswa Pada Materi Penyajian Data Kelas IV Sekolah Dasar," *Aksara: Jurnal Ilmu Pendidikan Nonformal*, vol. 7, no. 2, p. 685, May 2021, doi: 10.37905/aksara.7.2.685-712.2021.

[8] M. A. Simanjutak, M. Simanungkalit, D. T. Simamora, D. Nababan, and R. Raikhapoor, "Pengaruh Model Pembelajaran Think Pair Share Terhadap Keaktifan Belajar PAK Siswa Kelas IX di SMP Negeri 4 Tarutung Kabupaten Tapanuli Utara Tahun Pembelajaran 2023/2024," *Pendekar : Jurnal Pendidikan Berkarakter*, vol. 1, no. 5, pp. 206–222, doi: 10.51903/pendekar.v1i5.416.

[9] P. Fitriati Nurjannah, "Pengaruh Model Pembelajaran Think Pair Share Terhadap Keaktifan dan Hasil Belajar IPA," *Indonesian Journal Of Educational Research and Review*, vol. 2, no. 1, Apr. 2019, doi: 10.23887/ijerr.v2i1.17295.

[10] T. Tela, V. N. Yulian, and Y. Budianingsih, "Pengaruh Model Pembelajaran Kooperatif Tipe Think Pair Share (TPS) Terhadap Peningkatan Kemampuan Pemecahan Masalah Matematis Siswa," *Biormatika : Jurnal Ilmiah Fakultas Keguruan dan Ilmu Pendidikan*, vol. 5, no. 01, p. 114, Mar. 2019, doi: 10.35569/biormatika.v5i01.464.

[11] D. Yustiara, M. N. Kusumastuti, and S. Ramdhani, "Pengaruh Model Cooperative Learning Terhadap Peningkatan Pemahaman Konsep Matematika Dan Keaktifan Belajar," *Nuansa Akademik: Jurnal Pembangunan Masyarakat*, vol. 8, no. 2, pp. 519–534, Oct. 2023, doi: 10.47200/jnajpm.v8i2.2003.

[12] D. Yustiara, M. N. Kusumastuti, and S. Ramdhani, "Pengaruh Model Cooperative Learning Terhadap Peningkatan Pemahaman Konsep Matematika Dan Keaktifan Belajar," *Nuansa Akademik: Jurnal Pembangunan Masyarakat*, vol. 8, no. 2, pp. 519–534, 2023, doi: 10.47200/jnajpm.v8i2.2003.

[13] A. Alam and K. Khotimah, "Peningkatan Penguasaan Kosa Kata Bahasa Arab Melalui Game Arabic Treasure Hunter," *MUHIBBUL ARABIYAH: Jurnal Pendidikan Bahasa Arab*, vol. 1, no. 1, pp. 58–77, 2021, doi: 10.35719/pba.v1i1.9.

[14] D. L. D. Namiroh and Julianto, "Pengaruh Metode Treasure Hunt Terhadap Keterampilan Komunikasi Materi Siklus Hidup Hewan Di Sekolah Dasar," *Jurnal Penelitian Pendidikan Guru Sekolah Dasar*, vol. 7, no. 2, pp. 2771–2780, 2019.

[15] F. Fatimatuszahro, H. Hanifah, L. Hermawanti, and S. Wahyuni, "The Effect of Traditional Congklak Game Method on Students ' Learning Outcomes in Learning Mathematics in Elementary Schools," *Journal of Mathematics Instruction, Social Research and Opinion*, vol. 4, no. 1, pp. 17–32, 2025.

[16] Anatasia Riantika and Sutrisna Wibawa, "Kemampuan Berpikir Kritis Pada Pembelajaran Pkn Menggunakan Model PBL Berbasis Treasure Hunt Dan QR Code," *Semantik : Jurnal Riset Ilmu Pendidikan, Bahasa dan Budaya*, vol. 2, no. 1, pp. 201–209, 2024, doi: 10.61132/semantik.v2i1.278.

[17] R. Y. Cahyani, D. Triyanasari, and P. A. Tri, "Pengaruh Teknik Treasure Hunt Game Berbasis Model Think Pair Share Terhadap Pengaruh Hasil Belajar Matematika Siswa Kelas III," *Jurnal Riset Pendidikan dan Inovasi Pembelajaran Matematika (JRPIPM)*, vol. 3, no. 1, p. 1, 2019, doi: 10.26740/jrpipm.v3n1.p1-7.

[18] S. S, Sudarto; A, Asriadi; F, "Peningkatan Keaktifan Siswa Kelas V Sd Inpres 4/82 Waji dalam Pembelajaran IPA melalui Penerapan Model Pemblajaran Treasure Hunt," *Jurnal Pendidikan Dasar dan osial HUmaniora*, vol. 3, no. 9, pp. 569–576, 2024.

[19] B. Sadipun, "Penerapan Model Pembelajaran Kooperatif Tipe Think Pair Share Untuk Meningkatkan Prestasi Belajar Ips Siswa Kelas V Sdi Ende 14," *Inteligensi : Jurnal Ilmu Pendidikan*, vol. 3, no. 1, pp. 11–16, 2020, doi: 10.33366/ilg.v3i1.1461.

[20] S. S. Indra, K. M. Hsbudin, "Upaya Penggunaan Metode Treasure Hunt Dalam Meningkatkan Keaktifan Siswa Pada Mata Pelajaran SKI Siswa Kelas VIII MTS Negeri 1 Langkat," *Jurnal Pendidikan, Bahasa dan Budaya*, vol. 1, no. 3, pp. 46–58, 2023.

[21] R. R, Kamil; Y, Miaz; R, "Pengaruh penggunaan Model Pembelajaran Kooperatif Tipe Think Pair Share terhadap Motifasidan Hasil Belajar Siswa Kelas VI," *Jurnal Basicedu*, vol. 5, no. 6, pp. 6025–6033, 2021, doi: http://doi.org/10.31004/basicedu.v5i6.1744.

[22] E. P. Lestari, *Model Pembelajaran Think Pair Share Solusi Menumbuhkan Keberanian Berpendapat*. Lombok Tengah: Pusat Pengembangan Pendidikan dan Penelitian Indonesia, 2023.

[23] H. A, Sulistio; N, *Model Pembelajaran Kooperatife (Cooperative Learning Model)*. Jawa Tengah, 2022.

[24] R. Lubis, M. Herlina, and J. Rukmana, "Pengaruh Model Pembelajaran Think Pair Share Menggunakan Media Mind Mapping terhadap Aktivitas dan Hasil Belajar Kognitif Siswa," *BIOEDUSAINS: Jurnal Pendidikan Biologi dan Sains*, vol. 2, no. 2, pp. 160–178, 2019, doi: 10.31539/bioedusains.v2i2.978.

[25] Sugiyono, *Metode Penelitian Kuantitatif Kualitatif dan R&D*, Cetakan ke. Bandung, 2022.

[26] U. H, Hardian; H, Andrian;J, Ustiyawati; F, *Metode penelitian Kuantitatif & Kualitatif*. Yogyakarta, 2020.

[27] F. Nurjannah, "Pengaruh Model Pembelajaran Think Pair Share Terhadap Keaktifan dan Hasil Belajar IPA," *Indonesian Journal of Educational Research and Review*, vol. 2, no. 1, 2019, doi: Doi: https://doi.org/10.51903/pendekar.v1i5.416.

[28] M. A. Simanjutak, M. Simanungkalit, D. T. Simamora, D. Nababan, and Raikhapoor, "Pengaruh Model Pembelajaran Think Pair Share Terhadap Keaktifan Belajar PAK Siswa Kelas IX di SMP Negeri 4 Tarutung Kabupaten Tapanuli Utara Tahun …," *Pendekar …*, vol. 1, no. 5, 2023.

 https://doi.org/10.58421/misro.v4i3.649