

THE EFFECTIVENESS OF THE TREASURE HUNT TYPE DISCOVERY LEARNING MODEL ON STUDENT ENGAGEMENT IN ISLAMIC EDUCATION AND CHARACTER BUILDING

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Abstract: This study aims to increase student learning activity in Islamic Religious Education through the application of the Treasure Hunt type of Discovery Learning model. The background of this study stems from low student participation, especially in group discussions, due to monotonous conventional methods and limited access to technology. The method used is quantitative with an experimental design, involving 10th grade students at Tanjung Bintang 1 Public High School. The sample was selected using simple random sampling, with the control group using conventional methods and the experimental group receiving the Treasure Hunt type of Discovery Learning treatment. The instrument used was a learning activity questionnaire that was tested for validity and reliability. The results showed that the application of this model significantly increased student activity, especially in group discussions. The novelty of this research lies in the integration of Discovery Learning and the Treasure Hunt game in upper secondary Islamic Religious Education. This study shows that the combination of these two approaches creates an interactive and collaborative learning atmosphere and changes the role of the teacher to that of a facilitator.

Keywords: Learning Engagement; Discovery Learning; Treasure Hunt

Abstrak: Penelitian ini bertujuan untuk meningkatkan keaktifan belajar peserta didik dalam Pendidikan Agama Islam melalui penerapan model Discovery Learning tipe Treasure Hunt. Latar belakang penelitian ini berawal dari rendahnya partisipasi siswa, terutama dalam diskusi kelompok, akibat metode konvensional yang monoton dan keterbatasan akses teknologi. Metode yang digunakan adalah kuantitatif dengan desain eksperimen, melibatkan siswa kelas X SMA Negeri 1 Tanjung Bintang. Sampel dipilih menggunakan simple random sampling, dengan kelompok kontrol menggunakan metode konvensional dan kelompok eksperimen diberi perlakuan Discovery Learning tipe Treasure Hunt. Instrumen yang digunakan adalah angket keaktifan belajar yang diuji validitas dan reliabilitasnya. Hasil penelitian menunjukkan bahwa penerapan model ini secara signifikan meningkatkan keaktifan siswa, terutama dalam diskusi kelompok. Kebaruan penelitian terletak pada integrasi Discovery Learning dan permainan Treasure Hunt dalam pembelajaran Pendidikan agama Islam tingkat menengah atas. Penelitian ini menunjukkan bahwa kombinasi kedua pendekatan menciptakan suasana belajar yang interaktif dan kolaboratif, serta mengubah peran guru menjadi fasilitator.

Kata Kunci: Keaktifan Belajar, Discovery Learning, Treasure Hunt

INTRODUCTION

Student learning activity is an important element in successful learning, as it involves both physical and non-physical activities in acquiring knowledge. Passive students tend to have difficulty accepting material, while active students are more involved through activities such as explaining tasks, solving problems, or searching for additional information (Nopianur et al., 2023; Putri & Susanto, 2023; Rachim et al., 2024). Factors influencing student activity are divided into internal factors, such as physical condition, intelligence, readiness, talent, and learning experience, and external factors, such as motivation, interesting teaching materials, learning media, and a conducive classroom atmosphere (Kurniawati et al., 2023; Padilla et al., 2025; Rosyidah et al., 2024). In Islamic Religious Education, teachers play an important role in stimulating students' attention, creating a comfortable classroom atmosphere, and encouraging active participation so that students are more motivated and understand the material well (Irnajuliana et al., 2025; Rokhanah et al., 2021; Zuriatun Hasanah, 2021).

Ideal learning conditions are achieved when students are able to concentrate, absorb the material well, and demonstrate positive behavioral changes. Good concentration allows students to focus without distraction, supported by the use of interesting methods and media so that learning objectives are achieved to the maximum extent possible (Masnu & Aisyah,

2024; Riinawati, 2021). The use of interactive technology such as video, audio, and e-learning also contributes to creating flexible, engaging, and relevant learning experiences for students (Evitasari & Aulia, 2022; Suranti, 2025). In addition, teachers need to provide learning experiences that take diversity into account so that students not only gain knowledge but also become more open, active, and able to interact in a diverse society (Kamza et al., 2021; Mairiska, 2024; Yanti et al., 2023).

Based on preliminary research at SMA Negeri 1 Tanjung Bintang through observation, interviews, and documentation of Islamic Education teacher Dra. Hj. Rosfiah, M.Pd.I and several 10th grade students, several obstacles were found that affect the effectiveness of learning. The problems that arose included low student activity and concentration, a lack of variety in interactive methods, limited access to technology due to a ban on bringing cell phones, and differences in student learning styles that were not fully accommodated. This shows the need for learning strategies that are more adaptive, interesting, and tailored to student needs so that the Islamic Religious Education learning process can be optimized.

The research stages were carried out systematically. First, the researcher applied the Treasure Hunt type of Discovery Learning steps, namely: (a) determining learning objectives, (b) identifying student characteristics, (c) selecting lesson materials, (d) determining topics to be studied inductively, (e)

developing learning materials in the form of examples, illustrations, and assignments, (f) arranging topics from simple to complex according to developmental stages, and (g) assessing the learning process and outcomes. These steps were applied in group activities that required students to actively discuss according to the teacher's instructions. Second, after the treatment was completed, both classes were given a

post-test in the form of a learning activity questionnaire to measure differences in activity levels, especially in terms of group discussion. Third, the collected data were analyzed using comparative statistical tests to determine the effectiveness of the Treasure Hunt type of Discovery Learning model on the learning activity of Islamic Education students at SMA Negeri 1 Tanjung Bintang.

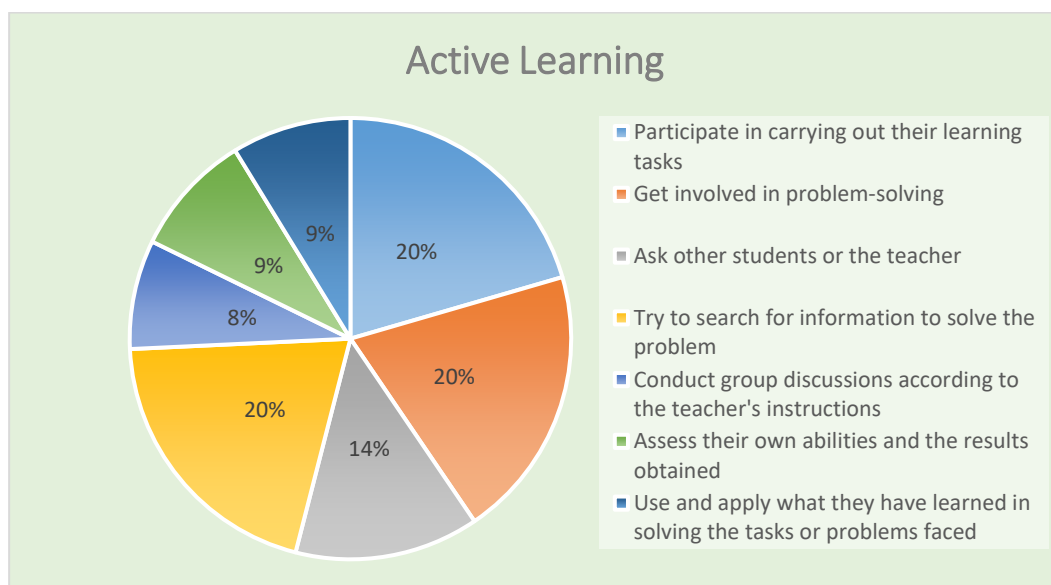


Figure 1. Results of the Learning Activity Questionnaire for Students at SMA Negeri 1 Tanjung Bintang

Based on the circle diagram regarding student activity, it can be seen that most students were quite active in several important aspects of learning, such as carrying out learning tasks, engaging in problem solving, and searching for needed information (each at 20%). However, there are indicators that need attention, namely the indicator of asking teachers or friends when encountering difficulties, which only scored 8%, as well as the indicators of group discussion, self-assessment, and

application of learning outcomes, which only scored around 9%. This shows that students are still not brave or accustomed to asking questions when they do not understand and are less active in discussing, evaluating, and applying their learning outcomes. The main problem lies in the low ability of students to communicate actively and reflect on their understanding, which is very important in supporting a more in-depth and meaningful learning process.

To support student learning activity, a learning model is needed that makes it easier for them to understand the material while encouraging cooperation (Ayu et al., 2025; Dewi et al., 2025). One alternative that can be used is Discovery Learning, a learning model that maximally involves students in searching for, investigating, and discovering knowledge, attitudes, and skills independently, critically, and logically (Marfu & Hamdani, 2025; Suwiti, 2022). This model helps improve students' skills, fosters independence, and provides an enjoyable learning experience due to the encouragement to investigate and the feeling of success in discovering something on their own (Mustikaningrum et al., 2021; Ningsih & Pramaeda, 2020). To make learning more interesting and interactive, additional innovation is needed in the form of the Treasure Hunt game method, which is designed to create a collaborative and enjoyable learning atmosphere that can increase student motivation and activity (Mar & Amin, 2025; Rahmawati & Listiani, 2023; Wulandari putri, Budiaman, 2024).

The integration of Discovery Learning with the Treasure Hunt method is an innovative strategy to transform conventional teacher-centered learning into student-centered learning. In this approach, teachers act as facilitators who guide the learning process, while students actively seek and discuss concepts through challenging activities

and clues in games, both inside and outside the classroom (Pradana & Hidayati, 2024; Ulfa et al., 2025). The application of a combination of these two methods is expected to create a more effective, active, and enjoyable learning experience, as well as serve as a reference for teachers in improving the quality of Islamic Religious Education that encourages student activity, collaboration, and full participation. (Malay et al., 2025; Purwati, 2020; Susilowati, 2023).

Various studies show that active learning methods such as Treasure Hunt and Discovery Learning can increase student motivation and learning activity, as evidenced by Sudarto, Asriadi(2024), and Risma Febriani Syam(2024). Wisnu Ade Setiawan, Yanti Yandri Kusuma, and Melvi Lesmana Alim (2023), Nirmalasari, Nurhaedah, and Herlina Iskandar (2023), Khairummuna Indra, Marhan Hasibuan, , and Syarifah (2023), as well as Susi Asnita Asis, Andi Makkasau, and Ruriani (2025). However, most of these studies are still limited to elementary and junior high school levels and have not combined Discovery Learning with the Treasure Hunt type in Islamic Education learning at the high school level. Therefore, this study offers a novelty in the form of integrating the two approaches to increase the learning activity of Islamic Education students at SMA Negeri 1 Tanjung Bintang, with the aim of presenting more participatory, contextual, and enjoyable

learning while building students' spiritual understanding.

The urgency of this research lies in the urgent need to overcome low student activity and focus in Islamic Religious Education learning due to monotonous methods and limited access to learning resources. This research has important implications because the results can be used as a reference for teachers in designing more adaptive, varied, and enjoyable learning strategies according to student characteristics. In addition, the findings of this study can also help schools in reviewing their learning policies to better support students' learning needs, so that the Islamic Religious Education learning process can take place in a more active, effective, and meaningful manner.

Therefore, to address the identified problems, this study aims to test the application of the Treasure Hunt type of Discovery Learning model in the context of Islamic religious education at the high school level, with a focus on increasing student activity in group discussions. This model was chosen because of its ability to encourage students to interact more actively, explore knowledge independently, and work together to complete tasks. This study also seeks to fill the gap in previous research, which was mostly limited to elementary and junior high school levels and did not explore the use of Treasure Hunt in the context of Islamic religious education. With this approach, it is hoped that a more participatory and contextual learning atmosphere can be created, which

not only increases student activity but also strengthens their understanding of Islamic Religious Education material in greater depth. Thus, this study is expected to provide practical contributions to the development of more effective and adaptive learning strategies in schools with limited technology.

METHOD

This study was conducted in the odd semester of the 2025/2026 academic year at SMA Negeri 1 Tanjung Bintang, involving 10th grade students as the research subjects. From a total population of 360 students, samples were selected using simple random sampling, resulting in two classes as research groups: class X A as the control group and class X H as the experimental group. The control group was taught using conventional methods, while the experimental group was taught using the Treasure Hunt type of Discovery Learning model. The main focus of this study was to increase student learning activity, with a particular emphasis on their ability to carry out group discussions according to the instructions given by the teacher, which had been the most problematic indicator of activity.

The instrument used in this study was a questionnaire with 30 statements developed based on indicators of learning activity, with the main objective of measuring student participation in group discussions. The questionnaire consisted of 15 positive items and 15 negative items. Before use, this instrument was tested to

ensure its validity and reliability. The validity test results using Pearson Product Moment correlation showed that all 15 items were valid because the calculated r value was greater than the table r at a significance level of 5%. Furthermore, to test reliability, the Cronbach's Alpha test was used, which produced a value of 0.87, which is in the high category, so that this questionnaire was declared consistent and suitable for data collection. With an instrument that has been tested for validity and reliability, this study is expected to provide an accurate picture of student learning activity in Islamic religious education using different methods.

RESULTS AND DISCUSSION

In the results and discussion section, this study aims to evaluate the effectiveness of applying the Treasure Hunt type of Discovery Learning model on student learning activity in Islamic Religious Education at SMA Negeri 1 Tanjung Bintang. Before proceeding with further analysis, normality and homogeneity of variance tests were conducted to ensure that the data obtained met the assumptions required in parametric statistical analysis. The normality test is important to confirm that the data comes from a normal distribution, so that the use of the independent sample t-test can be justified. After the data was declared to meet the assumptions of normality and homogeneity of variance, a t-test analysis was then performed to see the significant difference between the control

group using conventional learning methods and the experimental group using the Treasure Hunt Discovery Learning model.

The results obtained from the t-test analysis will reveal the extent to which the application of this model can influence student learning activity, particularly in the aspect of group discussion, which has been a challenge in Islamic religious education. In addition, this section will also discuss how this learning model contributes to increasing student interaction and changing their learning behavior. This understanding is very important because it aims to provide an overview of the success of discovery- and game-based learning models in the context of Islamic education in secondary schools.

Before testing the hypothesis statistically, a normality test was conducted to ensure that the data was normally distributed, an important prerequisite for parametric analyses such as t-tests. The normality test was performed using the Kolmogorov-Smirnov and Shapiro-Wilk methods. If the p-value was greater than 0.05, the data was considered normal. The Shapiro-Wilk test results show a p-value of 0.081 for the control class and 0.214 for the experimental class, both of which are greater than 0.05. The Kolmogorov-Smirnov test also shows a p-value of 0.200, which supports these findings. Thus, the assumption of normality is satisfied, and the data is suitable for further t-test analysis.

Table 1. Normality Test Results

| Tests of Normality | | | | | | |
|--------------------|--------------------|---------------------------------|----|-------|--------------|---------|
| Results | Class | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | |
| | | Statistic | df | Sig. | Statistic | df Sig. |
| | Control class | .129 | 30 | .200* | .938 | 30 .081 |
| | Experimental class | .119 | 30 | .200* | .954 | 30 .214 |

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Based on the normality test results shown in the Tests of Normality table, the significance value (Sig.) in the Shapiro-Wilk test for the control class is 0.081 and for the experimental class is 0.214. Both values are greater than the significance limit of 0.05, so it can be concluded that the data in both groups are normally distributed. This result is also supported by the Kolmogorov-Smirnov test, which shows a significance value of 0.200 in both groups. Thus, the data distribution meets the normality assumption and is

suitable for further analysis using parametric statistical techniques, specifically the independent sample t-test, which requires that the data come from a normal distribution. Fulfilling this normality assumption is very important in linear regression analysis, because one of the prerequisites of regression is that the data used must come from a normal distribution. Therefore, the data in this study is feasible and eligible for use in simple linear regression analysis.

Table 2. Homogeneity Test Results

| Test of Homogeneity of Variance | | | | | |
|---------------------------------|--------------------------------------|-----------|-----|--------|------|
| Result | | Levene | | | |
| | | Statistic | df1 | df2 | Sig. |
| | Based on Mean | .006 | 1 | 58 | .940 |
| | Based on Median | .003 | 1 | 58 | .956 |
| | Based on Median and with adjusted df | .003 | 1 | 57.795 | .956 |
| | Based on trimmed mean | .007 | 1 | 58 | .935 |

Based on the results of the test of homogeneity of variance shown in the Test of Homogeneity of Variance table, a significance value (Sig.) of 0.940 was obtained in the Based on Mean test. In addition, in other calculation methods, such as Based on Median and Based on Median and with adjusted df, the

significance values are 0.956 and 0.935, respectively. All of these significance values are well above the $\alpha = 0.05$ limit, indicating that there is no significant difference in variance between the control group and the experimental group. Thus, it can be concluded that the data from both groups have

homogeneous or equal variances. Variance homogeneity is an important prerequisite in conducting an independent sample t-test. Since the assumption of homogeneity is met, the t-test analysis can be performed using the Equal Variances Assumed calculation

model. This condition ensures that the resulting hypothesis testing results are valid and can be interpreted in accordance with applicable statistical analysis rules. With homogeneity, the data can be used for further linear regression analysis.

Table 3. T-Test Results

| Independent Samples Test | | t-test for Equality of Means | | |
|--------------------------|-----------------------------|------------------------------|--------|-----------------|
| | | t | df | Sig. (2-tailed) |
| Result | Equal variances assumed | -2.525 | 58 | .014 |
| | Equal variances not assumed | -2.525 | 57.997 | .014 |

Based on the results of the Independent Samples t-test, a significance value of 0.940 was obtained in the Levene test, indicating that the variances of the two groups were homogeneous ($p > 0.05$), so the t-test was interpreted using the Equal variances assumed row. The t-test results show a t-value of -2.525 with $df = 58$ and a significance value of 0.014. Since the significance value is less than 0.05, it can be concluded that there is a significant difference between the two groups in terms of the Results variable. The Mean Difference value of -4.867 indicates that the average of the first group is lower than that of the second group, and the 95% confidence interval (-8.725 to -1.008) does not cross zero, confirming that the difference is statistically significant. Thus, the factors that

differentiate the two groups are proven to have a significant effect on the difference in mean values for the outcome variable.

The results of the study indicate that the application of the Treasure Hunt type of Discovery Learning model significantly increased student learning activity in Islamic religious education subjects at SMA Negeri 1 Tanjung Bintang. This increase was particularly evident in group discussions, which had previously been the weakest indicator. This confirms that innovative learning models that combine elements of discovery with game activities can overcome the obstacles to activity that have been a major constraint in Islamic religious education learning. In other words, the success of this model lies not only in the variety of methods, but also in

the learning experience that facilitates the overall involvement of students. These findings are in line with the research by , which states that Discovery Learning can increase active participation through student involvement in discovering concepts independently. However, previous studies have generally been limited to the conventional application of Discovery Learning without integrating a game-based approach. By adding the Treasure Hunt element, this study successfully addresses this limitation by introducing activities that are more collaborative, interactive, and contextual.

Various previous studies, such as Andriyani (2025) and Assidiq (2025) on the effectiveness of Treasure Hunt in learning, show that this game method contributes to increasing motivation and enthusiasm for learning. However, these studies do not specifically relate it to Discovery Learning. Therefore, the novelty of this study is to integrate both discovery and game approaches in the context of PAI learning, so that it can optimize students' learning activity, which was previously low, especially in terms of courage to ask questions and discuss. However, the results of this study show that students who are accustomed to conventional learning models tend to be passive, as found by in lailatul Alifah, (2024) . which highlights the role of teachers as the center of learning. Through the application of the Treasure Hunt type Discovery Learning, the role of

teachers shifts to that of facilitators, so that students are more free to explore, collaborate, and solve problems independently. This paradigm shift is one of the indicators of the success of activity-based learning transformation in vocational high schools.

Methodologically, this study also emphasizes the importance of learning activity questionnaires that have been tested for validity and reliability. By focusing on indicators of group discussion according to teacher instructions, this study highlights aspects that have often been overlooked in previous studies. Previous studies, such as those conducted by (Sukendra, I Komang, 2023; Yanti et al., 2023) . As well as (Harwati, 2021) . placed more emphasis on motivation or cognitive learning outcomes. Therefore, the contribution of this study lies in emphasizing group discussion activity as a crucial indicator of the success of Islamic religious education. (Alawiyah et al., 2023)

The implications of these results indicate that learning model innovations need to be adapted to the characteristics and needs of students in the digital age, even though access to technology in certain schools is still limited. By combining Discovery Learning and Treasure Hunt, teachers can provide an active learning experience without relying on gadget-based media, thus remaining relevant in schools that restrict cell phone use. These findings

provide practical contributions to schools with similar conditions, while enriching the literature on context-adaptive learning strategies.

Overall, this study closes the literature gap by offering an innovative, adaptive, and contextual learning model for Islamic religious education at the vocational high school level. The integration of the Treasure Hunt type of Discovery Learning has proven to be effective not only in increasing learning activity but also in building a collaborative and participatory culture in the classroom. The novelty of this study lies in the application of a combination of the two methods in the field of Islamic religious education at the senior high school level, which has not been widely explored previously. Thus, this study provides a theoretical contribution to the development of active learning models as well as practical implications for teachers and educational institutions in improving the quality of Islamic religious education.

Based on the respondent data presented in the table above, it can be seen that the students' responses to the questionnaire were dominated by high scores, ranging from 2 to 3, which indicates a positive attitude towards the statements presented. The average score for each statement item was in the range of approximately 2.8 to approximately 3.0, indicating that most respondents often to always displayed behavior in accordance with the indicators of learning activity.

The relatively high consistency of the average score on almost all items indicates stable student participation in learning activities, such as involvement in completing assignments, participating in discussions, and seeking relevant information. In addition, the total scores obtained by each respondent were in the high category, so it can be descriptively concluded that the level of student learning activity was high and this data is suitable for further analysis in testing research hypotheses.

CONCLUSION

Based on the results of the research conducted, it can be concluded that the application of the *Treasure Hunt* type of *Discovery Learning* model has proven to be effective in increasing student learning activity in Islamic Religious Education at Tanjung Bintang 1 Public High School. This model is particularly effective in overcoming low student participation in group discussions, which was previously the weakest indicator, by creating a more interactive, collaborative, and enjoyable learning atmosphere. The integration of the discovery approach with game activities not only encourages students to be more courageous in asking questions, discussing, and working together, but also confirms the shift in the role of teachers from the center of learning to facilitators. Thus, this study makes an important contribution both theoretically and practically, especially in developing

innovative, adaptive, and appropriate Islamic Religious Education learning strategies for students at the vocational secondary level.

REFERENCES

- Alawiyah, A., Sukron, J., & Firdaus, M. A. (2023). Penerapan Model Pembelajaran Kooperatif Times Games Tournament untuk Meningkatkan Keaktifan Belajar Siswa pada Pembelajaran Pendidikan Agama Islam. *Fitrah: Journal of Islamic Education*, 4(1), 69–82. <https://doi.org/10.53802/fitrah.v4i1.188>
- Aldy, A., Aminullah, A., Assidiq, I., Haliq, M. I., & Kamil, A. (2025). Model Treasure Hunt Berbantuan Media Gambar untuk Meningkatkan Hasil Belajar Peserta Didik Kelas IV. *JlIP - Jurnal Ilmiah Ilmu Pendidikan*, 8(7), 7171–7177. <https://doi.org/10.54371/jiip.v8i7.8429>
- Alifah, L., & Suranto, S. (2024). Peningkatan Keterampilan Kolaborasi Peserta Didik Melalui Metode Treasure Hunt pada Mata Pelajaran Ilmu Pengetahuan Alam dan Sosial. *Al Madrasah Jurnal Pendidikan Madrasah Ibtidaiya*, 8(3), 1265. <https://doi.org/10.35931/am.v8i3.3553>
- Andriyani, A., Ismawati, I., Hadijah, I., & Dyah Ariyani, W. (2025). Implementasi Model Pembelajaran Discovery Learning dalam Meningkatkan Keaktifan Belajar Siswa Pada Mata Pelajaran PAI. *Edukasiana: Jurnal Inovasi Pendidikan*, 4(3), 1078–1092. <https://doi.org/10.56916/ejip.v4i3.1644>
- Ayu, D., Alberida, H., & Rahmi, F. O. (2025). Pengaruh Model Discovery Learning Terhadap Kemampuan Berpikir Kritis Peserta Didik Pada Pembelajaran Biologi: Literatur Review. *Peshum: Jurnal Pendidikan, Sosial Dan Humaniora*, 4(3), 4661–4674. <https://doi.org/10.56799/peshum.v4i3.8722>
- Azizah, D. D. (2023). Pengembangan media pembelajaran interaktif berbasis Articulate Storyline berintegrasi selfRegulated Learning pada materi perubahan wujud benda kelas IV sekolah dasar. *JPGSD*, 11(11), 2439–2448.
- Dewi, R. A. K., Sunanto, L., & Casniti. (2025). Upaya Peningkatan Keaktifan Dan Hasil Belajar Siswa Dengan Menggunakan Model Discovery Learning di Sekolah Dasar. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(02), 872–883. <https://doi.org/10.23969/jp.v10i02.23960>
- Evitasari, A. D., & Aulia, M. S. (2022). Media Diorama dan Keaktifan Belajar Peserta Didik dalam Pembelajaran IPA. *Jurnal Riset Pendidikan Dasar (JRPD)*, 3(1), 1. <https://doi.org/10.30595/jrpd.v3i1.11013>
- Harwati, C. (2021). Penerapan Model Pembelajaran Problem Based Learning Untuk Meningkatkan Keaktifan Belajar Siswa. *Jurnal Pendidikan Profesi Guru*, 2(2), 51–55. <https://doi.org/10.22219/jppg.v2i2.14834>
- IrnaJuliana, Wardana, & Aminullah. (2025). Implementasi Model Pembelajaran Discovery Learning Terhadap Keaktifan Belajar Siswa Pada Mata Pelajaran PAI di SMAN 23 Bone. *Teaching and Learning Journal of Mandalika (Teacher)* e-ISSN 2721-9666, 6(2), 395–408. <https://doi.org/10.36312/teacher.v6i2.5001>

- Kamza, M., Ibrahim, H., & Lestari, A. I. (2021). Pengaruh Metode Pembelajaran Diskusi dengan Tipe Buzz Group Terhadap Keaktifan Belajar Siswa pada Mata Pelajaran IPS. *Jurnal Basicedu*, 5(5), 4120–4126.
<https://doi.org/10.31004/basicedu.v5i5.1347>
- Kurniawati, L. W., Yasa, I. K. M., & Artayasa, I. P. (2023). Penerapan Model Discovery Learning untuk Meningkatkan Keaktifan Belajar Siswa pada Materi Ekosistem Kelas X SMAN 6 Mataram. *P2M STKIP Siliwangi*, 10(2), 104–110.
<https://doi.org/10.22460/p2m.v10i2.3845>
- Mairiska, A. (2024). *Analisis Kesulitan Belajar dalam Keberagaman Karakteristik Individu di Masyarakat untuk Kelas 3 di SD Dharma Karya UT. Nunan 1992*, 502–509.
- Malay, I., Aulia, A., Utari, D., Meldayani, M., & Falda, S. N. (2025). Analisis Model Pembelajaran Discovery Learning untuk Meningkatkan Pembelajaran pada LCE (Language & Cultural Exchange). *Education Achievement: Journal of Science and Research*, 207–214.
<https://doi.org/10.51178/jsr.v6i1.2307>
- Mar, N., & Amin, S. (2025). *The influence of Discovery Learning model on student activeness and sociology Learning Outcomes*. 6(1), 468–479.
- Marfita ike prajayana, Ifta fariyah, siti inganah. (2025). *Penerapan model Discovery Learning berbasis digital dalam pembelajaran IPAS untuk meningkatkan motivasi belajar siswa sekolah dasar*. 12(2), 850–866.
- Marfu, N., & Hamdani, M. F. (2025). *Efektifitas Model Pembelajaran Discovery Learning Terhadap Keaktifan Dan Hasil Belajar Siswa SMPN 5 Pekanbaru*. 07(1), 144–159.
- Masnu, S., & Aisyah, N. H. (2024). *Pemanfaatan aplikasi Quizizz dalam keaktifan belajar pada pembelajaran pendidikan agama islam di Madrasah Tsanawiyah*. 13(001), 595–604.
- Mustikaningrum, G., Widiyanto, W., & Mediatati, N. (2021). Application of The Discovery Learning Model Assisted by Google Meet to Improve Students' Critical Thinking Skills and Science Learning Outcomes. *International Journal of Elementary Education*, 5(1), 30.
<https://doi.org/10.23887/ijee.v5i1.34344>
- Ningsih, S. C., & Pramaeda, T. D. O. (2020). Efektivitas Model Pembelajaran Discovery Learning Berbantuan E-Learning Ditinjau Dari Kemampuan Pemecahan Masalah. *Aksioma : Jurnal Matematika Dan Pendidikan Matematika*, 11(1), 116–130.
<https://doi.org/10.26877/aks.v11i1.5576>
- Nopianur, Y. A., Waluyati, S. A., & Saputra, A. (2023). Peningkatan Keaktifan Belajar Peserta Didik Melalui Model Discovery Learning Pada Mata Pelajaran PPKn. *Melior : Jurnal Riset Pendidikan Dan Pembelajaran Indonesia*, 3(1), 20–27.
<https://doi.org/10.56393/melior.v3i1.1649>
- Padilla, S., Kaseng, E. S., & Marhayati. (2025). *Studi mengenai faktor-faktor yang mempengaruhi keaktifan dan Minat belajar siswa di SMKN 2 Soppeng*. 04(01), 236–246.
- Pradana, S. K., & Hidayati, S. N. (2024). Analisis Keaktifan Belajar Siswa Melalui Model Pembelajaran Discovery Learning Berbantuan Liveworksheet Di Smp Negeri 39 Surabaya. *Eduproxima : Jurnal Ilmiah Pendidikan IPA*, 6(1), 235–241.
<https://doi.org/10.29100/.v6i1.4354>

- Purwati, R. P. (2020). UPAYA PENINGKATAN KEAKTIFAN BELAJAR PESERTA DIDIK DENGAN PENDEKATAN DISCOVERY LEARNING MENGGUNAKAN GOOGLE CLASSROOM. *Habitus: Jurnal Pendidikan, Sosiologi, & Antropologi*, 4(1), 202. <https://doi.org/10.20961/habitus.v4i1.45725>
- Putri, R. R., & Susanto, R. (2023). Upaya meningkatkan keaktifan belajar siswa pada mata pelajaran IPS menggunakan model two stay two stray. *JRTI (Jurnal Riset Tindakan Indonesia)*, 8(1), 111. <https://doi.org/10.29210/30033106000>
- Rachim, M. R., Salim, A., & Qomario, Q. (2024). Pemanfaatan Augmented Reality Sebagai Media Pembelajaran Terhadap Keaktifan Belajar Siswa Dalam Pendidikan Modern. *Jurnal Riset Dan Inovasi Pembelajaran*, 4(1), 594–605. <https://doi.org/10.51574/jrip.v4i1.1407>
- Rahmawati, I. A., & Listiani, I. (2023). PENERAPAN METODE TREASURE HUNT UNTUK MENINGKATKAN KEMAMPUAN MENYELESAIKAN SOAL CERITA PADA SISWA KELAS IV. 6356, 243–252.
- Riinawati. (2021). *hubungan konsentrasi belajar siswa terhadap prestasi belajar peserta didik pada masa pandemi covid-19 di sekolah dasar riinawati*. 3(4), 2305–2312.
- Rokhanah, N., Widowati, A., & Sutanto, E. H. (2021). Peningkatan Keaktifan Belajar Siswa dengan Menerapkan Model Pembelajaran Kooperatif Tipe Student Team Achievement Divisions (STAD). *Edukatif: Jurnal Ilmu Pendidikan*, 3(5), 3173–3180. <https://doi.org/10.31004/edukatif.v3i5.860>
- Rosyidah, A., Azka, R., & Marhaeningsih, S. Y. (2024). *Penerapan LKPD pada Model Pembelajaran Discovery Learning Untuk Meningkatkan Keaktifan Belajar dan Hasil Belajar Matematika Siswa SMA*. 3, 19–25.
- Sudarto, Asriadi, R. F. S. (2024). *Peningkatan keaktifan siswa kelas V SD INPRES 4/82 WAJI dalam pembelajaran ipa melalui penerapan model pembelajaran treasure hunt*. 3(9), 569–576.
- Sukendra, I Komang, ni putu diah A. (2023). *Penerapan pembelajaran berdiferensiasi berbantuan elkpd untuk meningkatkan keaktifan belajar matematika siswa*. 24(1), 55–63. <https://doi.org/10.5281/zenodo.7813406>
- Suranti. (2025). *Peran E-Learning dalam meningkatkan kualitas kualitas pendidikan agama islam*. 1, 8–14.
- Susilowati, D. (2023). Peningkatan Keaktifan Belajar Peserta Didik Melalui Implementasi Metode Eksperimen Pada Mata Pelajaran IPAS. *Khazanah Pendidikan*, 17(1), 186. <https://doi.org/10.30595-/jkip.v17i1.16091>
- Suwiti, N. K. (2022). *Implementasi Model Pembelajaran Discovery Learning Untuk Meningkatkan Hasil Belajar*. 2, 628–638. <https://doi.org/10.5281/zenodo.6204383>
- Syam, R. F. (2024). *Peningkatan Keaktifan Siswa Kelas V SD Inperes 4/82 Wajil dalam Pembelajaran ipa Melalui Penerapan Model Pembelajaran Treasure Hunt*. 3(9), 569–576.
- Ulfa, K., Fauziah, A., & Ningrum Mawardi, D. (2025). Systematic Literature Review: Model Pembelajaran Discovery Learning Untuk Meningkatkan Kemampuan Numerasi Siswa Sekolah Menengah

Pertama. *AB-JME: Al-Bahjah Journal of Mathematics Education*, 3(1), 1–13.

<https://doi.org/10.61553/abjme.v3i1.525>

Wulandari putri, Budiaman, saipiatuddin. (2024). *Penerapan Treasure Hunt sebagai media pembelajaran IPS dalam meningkatkan keaktifan siswa di SMPN 57 Jakarta*. 1(3), 3853–3857.

Yanti, N. H., Nuvitalia, D., Miyono, N., & Rizkiyati, N. (2023). Analisis Keaktifan Belajar Siswa Sekolah Dasar menggunakan Aplikasi Wordwall. *Ideguru: Jurnal Karya Ilmiah Guru*, 8(3), 634–638. <https://doi.org/10.51169/ideguru.v8i3.667>

Zuriatun Hasanah. (2021). *Model pembelajaran kooperatif dalam menumbuhkan keaktifan belajar siswa*. 1(1), 1–13.