



The Influence of the Discovery Learning Model on Writing Skills for Observation Report Texts

Giska Mardatillah Zikra^{1*}, Silvia Permatasari², Tria Putri Mustika³, Mangatur Sinaga⁴

¹²³⁴Prodi Pendidikan Bahasa dan Sastra Indonesia, Universitas Riau, Riau, Indonesia

*E-mail: giska.mardatillah3214@student.unri.ac.id

ABSTRACT

Discovery learning is a student-centered learning model that encourages students to discover concepts, principles, or knowledge for themselves through exploration, observation, and active problem-solving. This method shifts the teacher's role from a source of information to a facilitator, aiming to improve in-depth understanding, critical thinking skills, and long-term memory retention. This study aims to see the effect of the discovery learning model on the ability to write observational report texts. This study was conducted at SMK Muhammadiyah 3 Terpadu Pekanbaru in the odd semester of the 2025/2026 academic year. This study used a quantitative descriptive method based on quasi-experiments using one group pretest and posttest design. The population in this study were all 10th grade students who participated in the learning of the ability to write observational report texts using the discovery learning model, totaling 34 students while the sample in this study amounted to 31 students selected using a simple random technique. The instrument in this study was a test to write observational report texts involving the completeness of the text content, text structure, and linguistic rules as indicators in the assessment rubric. Data analysis used the Wilcoxon test because the data were not normally distributed. The results showed an increase in students' ability to write observational report texts after the implementation of the discovery learning model. The Asymp. sig. (2-tailed) value was smaller than 0.05 so it can be concluded that the discovery learning model had a significant effect on writing observational report texts for 10th grade students of SMK Muhammadiyah 3 Terpadu Pekanbaru.

Keywords: discovery learning, writing skills, observation report text

Pengaruh Model *Discovery Learning* terhadap Keterampilan Menulis Teks Laporan Hasil Observasi

ABSTRAK

Discovery learning adalah model pembelajaran yang berpusat pada siswa yang mendorong siswa menemukan sendiri konsep, prinsip, atau pengetahuan melalui eksplorasi, pengamatan, dan pemecahan masalah aktif. Metode ini mengubah peran guru dari sumber informasi menjadi fasilitator, bertujuan meningkatkan pemahaman mendalam, kemampuan berfikir kritis, dan retensi ingatan jangka panjang. Penelitian ini bertujuan untuk melihat pengaruh model *pembelajaran discovery learning* terhadap keterampilan menulis teks laporan hasil observasi. Penelitian ini dilaksanakan di SMK Muhammadiyah 3 Terpadu Pekanbaru pada semester ganjil tahun ajaran 2025/2026. Penelitian ini menggunakan metode deskriptif kuantitatif berbasis quasi eksperimen yang menggunakan *one grup pretest and posttest design*. Populasi dalam penelitian ini adalah seluruh kelas X yang mengikuti pembelajaran keterampilan menulis teks laporan observasi menggunakan model *discovery learning* yang berjumlah 34 siswa sedangkan sampel dalam penelitian ini berjumlah 31 siswa yang dipilih dengan menggunakan teknik random sederhana. Instrumen dalam penelitian ini adalah tes keterampilan menulis teks laporan hasil observasi yang melibatkan kelengkapan isi teks, struktur teks, serta kaidah kebahasaan sebagai indikator dalam rubrik penilaian. Analisis data menggunakan uji *wilcoxon* karena data tidak berdistribusi normal. Hasil penelitian menunjukkan adanya peningkatan keterampilan menulis teks laporan observasi siswa setelah diterapkannya model pembelajaran *discovery learning*. Nilai Asymp. Sig. (2-tailed) lebih kecil dari 0,05 sehingga dapat disimpulkan bahwa model *discovery learning* berpengaruh signifikan terhadap keterampilan menulis teks laporan hasil observasi siswa kelas X SMK Muhammadiyah 3 Terpadu Pekanbaru.

Kata kunci: discovery learning, keterampilan menulis teks, laporan hasil observasi

Submitted
04/02/2026

Accepted
04/03/2026

Published
18/03/2026

Citation	Zikra, G. M., Permatasari, S., Mustika, T. P., & Sinaga, M. (2026). The Influence of the <i>Discovery Learning Model</i> on Writing Skills for Observation Report Texts. <i>Jurnal Pembelajaran Bahasa dan Sastra, Volume 5, Nomor 2, Maret 2026, 1577-1584</i> . DOI: https://doi.org/10.55909/jpbs.v5i2.1253
----------	--

Publisher
Raja Zulkarnain Education Foundation

INTRODUCTION

This research was conducted to address the phenomenon of students' low ability to write observational reports. Current learning tends to be teacher-centered, resulting in limited opportunities for students to explore ideas, directly observe objects, and independently discover appropriate writing concepts. Writing is an important skill in Indonesian language learning because it demands critical and systematic thinking. Karim (2023), Razak (2000), states that writing skills require consistent practice to improve one's ability to convey ideas or thoughts both orally and in writing. One type of writing skill learned at the high school/vocational school level is writing observational reports. An observational report is a written report based on observations of an object under study, which is then translated into written form (Laia, 2023; Rusdianto et al., 2023). This text aims to convey factual information based on observations.

However, students' ability to write observational reports remains relatively low. In her research, Oktaviani (2021) stated that students are generally capable of presenting observational data but still have difficulty developing detailed descriptions. Furthermore, Aisyah (2022) stated that linguistic errors frequently found in observational report texts include the inappropriate use of scientific terms and errors in punctuation. Furthermore, research by Rizal and Rindayu (2020) showed that students' difficulties in writing observational report texts lie in their inability to structure the text comprehensively and their poor application of linguistic rules. From the aforementioned studies, it can be concluded that students not only experience difficulty developing text content but also struggle to structure the text and use proper and correct linguistic rules.

One cause of poor writing skills is the use of learning models that lack variety and monotony, which leads to student passivity and lack of engagement in the learning process. Learning that still uses conventional methods fails to encourage students to write clear observational report texts (Nursidik, 2021). Therefore, changes are needed

by implementing learning models that can encourage student activity and creativity. Therefore, the author attempted to implement one such learning model, the discovery learning model. This learning model focuses on students actively and independently carrying out processes and discoveries. In her research, Permata Sari (2018) stated that learning modules developed using a discovery learning approach for writing materials are highly practical.

The discovery learning model is a learning approach that places students at the center of learning activities, encouraging them to think actively through independent search and investigation of information or knowledge (Cahyaningsih & Assidik, 2021). This model transforms the learning environment from passive to active and creative, enabling students to be directly involved in constructing their own understanding through observation, experimentation, and analysis. Nurhaeni (2020) also stated in her research that the discovery learning model transforms learning conditions from passive to active and creative. Based on this description, the discovery learning model is considered to align with the context of writing instruction. Through this model, students are given the opportunity to discover, explore, and develop ideas based on their own experiences and observations. This discovery process encourages active student involvement, thereby increasing their interest in writing, particularly observational report texts.

Based on this background, the research question is: does the discovery learning model affect the observational report writing skills of grade 10 students at SMK Muhammadiyah 3 Terpadu Pekanbaru? The purpose of this study was to determine the effect of implementing the discovery learning model on the observational report writing skills. Furthermore, the benefits of this research are expected to contribute to teachers' selection of effective learning models and improve the quality of writing instruction.

Relevant research studies include Syahrin Maulia's (2020) study, "The Effect of the Discovery Learning Model on Observation Report Writ-



ing Skills." Furthermore, Yenti et al.'s (2020) study, "The Effect of Using the Discovery Learning Model on Expository Writing Skills." Susila's (2020) study, "The Application of the Discovery Learning Model to Proposal Text Material in Improving Students' Indonesian Language Learning Outcomes," also points out. All three studies demonstrate that the discovery learning model has a positive contribution to improving writing skills and Indonesian language learning outcomes.

METHOD

This research employed a quantitative approach with an experimental method. The research design used was a one-group pretest–posttest. This study involved only one group/class, which began with a pretest before treatment, followed by treatment, and concluded with a posttest after treatment (Jannah et al., 2022; Fraenkel et al., 2012; Razak, 2017; Balaka, 2012). The research was conducted at SMK Muhammadiyah 3 Terpadu, Pekanbaru in October 2025.

The population in this study was all tenth-grade students at SMK Muhammadiyah 3 Terpadu Pekanbaru. The sample size was 31. The sampling technique used was purposive sampling. Purposive sampling is a deliberate sampling method that selects individuals or groups deemed most suitable and meeting predetermined criteria, such as classes that have never used the discovery learning model before.

The data collection instrument was a test for writing observational report texts. This test was used to measure students' writing skills before and after the treatment.

Data were analyzed using descriptive statistics and inferential statistics in the form of the Wilcoxon test using SPSS. This test was used to determine differences in students' writing skills before and after the treatment. The following are the indicators and assessment rubric for writing observational report texts.

Table 1
 Indicators and Rubric for Assessing Observational Report Text Writing Skills

Assessment Aspects	Indicator	Deskripsi	Score
Contents of the text of the observation report	Short story texts involve only one text structure	The observation results presented are very clear, informative, and supported by complete and relevant facts.	4
		The results of the observations presented are quite clear and informative, but the facts written are incomplete and irrelevant.	3
		The results of the observations presented are unclear, the information presented is limited and the facts written are irrelevant.	2
		The observation results presented are unclear, uninformative, and not supported by facts	1
	Integration Between content sections	Each part of the content is arranged cohesively, supports each other, is coherent and forms a complete unity of meaning	3
		The content is cohesive, but there is no connection between one part and another, and the content is not coherent	2
		The sections are not integrated, arranged separately or randomly, and do not form a clear unity of content	1

Linguistic rules	Compliance with the description of benefits: a. Clear, factual, and logical; b. Contains information and describes conclusions about observations	Benefits are explained clearly, factually, and logically. Describes the object realistically. Explanations are relevant to the observation results	3
		Benefits are described in general terms and are not entirely factual. The information is relevant but requires further investigation. Some benefits are poorly explained or do not align with observations	2
		Benefits are not explained clearly and factually. The description is too brief, opinionated, or irrelevant to the observation results. It does not adequately demonstrate the importance of the object being observed	1
	Use of noun phrases, relational verbs and natural active verbs, varied conjunctions and appropriate verbs, correct spelling and punctuation	The text uses noun phrases, relational verbs, and natural active verbs correctly and consistently; conjunctions are used in a variety of ways and according to context; verbs are correct; there are no spelling or punctuation errors.	3
		The text uses noun and verb phrases but is not consistent; conjunctions are less varied; there are several inappropriate uses of verbs; there are 3-4 spelling and punctuation errors that are starting to interfere with understanding	2
		The text has minimal or inappropriate use of noun phrases, relational verbs, and natural active verbs; conjunctions are not varied or appropriate; many verbs are used incorrectly in context; there are many spelling and punctuation errors that interfere with overall understanding.	1
Maximum Score		20	
Minimum Score		6	

RESULT

Based on the results of research conducted at SMK Muhammadiyah 3 Terpadu Pekanbaru, it can be seen that the skill of writing observational report texts with the application of the discovery learning model has a positive influence. The implementation of learning in this study was carried out in four meetings, consisting of three learning meetings and one meeting to administer the posttest. This influence is seen from the increase in student learning outcomes through a comparison of pretest and posttest scores, and is supported by the results of observations of teacher and student activities during the learning process.

The results of the observation show that teacher activity reached a percentage of 93.00%, while student activity reached 95.00%. The high percentage of teacher activity indicates that teachers are able to implement learning according to the stages of the discovery learning model, starting from providing stimulus, guiding students in collecting and processing data, to directing students in drawing conclusions. Meanwhile, the high level of student activity indicates that students are actively involved in the learning process. Students do not only receive information passively, but actively observe, analyze, and discover concepts independently. This is in line with the characteristics of discovery learning which emphasizes active student involvement in the learning process. The pretest research can be presented in the following table.



Table 2
 Pretest Results of Observation Report Writing Skills

No.	Row Score	Standard Score	Kriteria	Pre-test	
				f	%
1	12	60	sufficient	1	3,23
2	13	65	sufficient	4	12,90
3	14	70	good	5	16,13
4	15	75	good	18	58,06
5	16	80	good	3	9,68
Total				31	100
Mean				14,58	
Std. Deviation				0,96	

Furthermore, the pretest results for writing observational report texts indicated that students' initial ability was in the adequate category, with an average score of 14,58. The lowest score was 12, and the highest was 16. Mode e.g. the majority of students, 18 students (58.06%), obtained a score of 15, which is considered good. Although the majority of students were in the good category, there were still some students in the adequate category, indicating that their ability to write observational report texts was not yet fully developed before the discovery learning model was implemented. The posttest assessment is presented in the following table:

Table 3
 Posttest Results of Observation Report Writing Skills

No.	Row Score	Standard Score	Kriteria	Post-test	
				f	%
1	16	80	good	5	16,13
2	17	85	good	15	48,39
3	18	90	very good	10	32,26
4	19	95	very good	1	3,23
Total				31	100
Mean				17,23	
Std. Deviation				0,76	

After implementing the discovery learning model, posttest results showed a significant improvement in students' observational report writing skills. The average posttest score increased to 17,23, falling into the "very good" category. The lowest score for students increased to 16, and the highest score reached 19. Furthermore, the standard deviation for the posttest, which was 0,76, indicated that student learning outcomes were more evenly distributed compared to the pretest. This improvement indicates that the discovery learning model is able to help students better understand the structure, content, and linguistic rules of observational report texts.

Data analysis prerequisite testing indicated that the pretest and posttest data were not normally distributed. The Shapiro-Wilk statistical value is 0.347 at sig. 0.000. Thus, sig. 0.000 < 0.001. Therefore, the hypothesis was tested using the nonparametric Wilcoxon test. (Figure 1).

Tests of Normality					
Kolmogorov-Smirnov ^a			Shapiro-Wilk		
Statistic	df	Sig.	Statistic	df	Sig.
0,347	31	0,000	0,815	31	0,000

a. Lilliefors Significance Correction

Figure-1
 Screenshot of Normality Calculation Results in SPSS

Test the influence of the discovery learning model on writing Skills for observation report texts using the Wilcoxon test. The results of the Wilcoxon test show a significance value (Asymp. Sig.) of 0.00, which is smaller than the significance level of 0.05 (Figure 2). Thus H0 is rejected and H1 is accepted, which means there is a significant influence of the use of the discovery learning model on students' ability to write observation report texts. All students

experienced an increase in learning outcomes after being given treatment. There were no negative ranks, which means no students obtained a lower posttest score than the pretest score.

Ranks				
		N	Mean Rank	Sum of Ranks
posttest - pretest	Negative Ranks	0 ^a	0,00	0,00
	Positive Ranks	31 ^b	16,00	496,00
	Total	31		
a. posttest < pretest				
b. posttest > pretest				
Test Statistics ^a				
		posttest - pretest		
Z				-5,013 ^b
Asymp. Sig. (2-tailed)				0,000
a. Wilcoxon Signed Ranks Test				
b. Based on negative ranks.				

Figure-2
 Wilcoxon Test Results Screenshot

DISCUSSION

This study aims to influence and improve observational report writing skills using the discovery learning model, specifically for tenth-grade students at SMK Muhammadiyah 3 Terpadu Pekanbaru. Based on the research conducted, writing observational report texts using the discovery learning model has a significant impact on students. This can be seen from the differences in students' pretest and posttest results, which increased after the implementation of this learning model. Therefore, it can be concluded that the discovery learning model is effective in improving the observational report writing skills of tenth-grade TKJ 2 students. This finding aligns with research conducted by Jenny et al. (2025) which stated that the discovery learning model has an effect on observational report writing.

In addition to quantitative improvements, learning using the discovery learning model also

has a positive impact on the learning process of observational report texts. Based on the data obtained, student activity results are higher than those of the teacher. During learning activities, students tend to be more active in observing objects, collecting data, and processing information before writing it down. This process can encourage students to be more creative and think critically, resulting in more structured and systematic writing. This is in line with research conducted by Maulida & Syahru (2020) which stated that the application of the discovery learning model can encourage active student involvement in developing observational report writing skills. The discovery learning model provides opportunities for students to discover text concepts themselves through direct experience. Thus, students not only receive information passively but are also actively involved in the learning process. This involvement has an impact on increasing students' understanding of the characteristics, structure, and language of observational report texts, which is further reflected in the improvement in the quality of their writing.

CONCLUSION

Based on the data analysis and discussion, it can be concluded that the application of the discovery learning model significantly influenced the writing skills of observational report texts of grade 10 students at SMK Muhammadiyah 3 Terpadu Pekanbaru. This effect was demonstrated by an increase in students' average scores from pretest to posttest after being treated with the discovery learning model.

The Wilcoxon test results showed a significance value (Asymp. Sig. 2-tailed) less than 0.05, thus accepting the alternative hypothesis and rejecting the null hypothesis. This indicates that the use of the discovery learning model was effective in improving students' ability to write observational report texts, both in terms of content completeness, text structure, and linguistic rules. Therefore, the discovery learning model can be used as an effective learning alternative to improve



students' writing skills, particularly in the area of observational report texts.

ACKNOWLEDGMENTS

The author would like to thank all parties who contributed to and supported this research. Special thanks go to the supervisor who provided direction, guidance, and constructive input from the planning stage through the preparation of this article. Furthermore, the author would like to express his gratitude to the Muhammadiyah 3 Integrated Vocational School in Pekanbaru, especially the principal, Indonesian language teachers, and students, who provided the opportunity, support, and cooperation throughout the research process. The author also appreciates all parties who assisted, both directly and indirectly, in ensuring the successful completion of this research and writing of this article.

REFERENCES

- Asiyah, S. T. (2022). Analisis Kesalahan Kebahasaan dalam Penulisan Teks Laporan Hasil Observasi Siswa SMP. *Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 7(1), 30–37.
- Balaka, M. Y. (2012). Metode Penelitian Kuantitatif. Editor: Iskandar Akhmaddien. Bandung: Widina Bhakti Persada.
- Cahyaningsih, E., & Karunia Assidik, G. (2021). Penerapan Model Pembelajaran *Discovery Learning* untuk Meningkatkan Minat Belajar pada Materi Teks Berita. *Buletin Pengembangan Perangkat, Pembelajaran*, 3(1), 1–7. <https://doi.org/10.23917/bppp.v3i1.19385>
- Fraenkel, J. R., Wallen, E. W., & Hyun, H. H. (2012). *How to Design and Evaluate Research in Education*. New York: McGraw-Hill.
- Jannah, M., Husniati, A., & Sirajuddin. (2022). Pengaruh Model Pembelajaran Teams Games Tournament (TGT) Berbasis Ice Breaking terhadap Hasil Belajar Matematika Siswa Sekolah Dasar. *Judikdas: Jurnal Ilmu Pendidikan Dasar Indonesia*, 1(2), 89–98. <https://doi.org/10.51574/Judikdas.V1i2.172>
- Jenny, RL, Hartati, YS, & Helda, T. (2025). Pengaruh Model Discovery Learning terhadap Keterampilan Menulis Teks Laporan Hasil Observasi Fase E SMA Negeri 15 Padang. *Jurnal Penelitian Pendidikan Indonesia*, 5 (2), 710-721.
- Karim, A. R. (2023). Analisis Pentingnya Kemampuan Menulis Karya Ilmiah pada Siswa SMA. *NUSRA: Jurnal Penelitian dan Ilmu Pendidikan*, 4(4), 1226-1233.
- Laia, E. (2023). Analisis Struktur Teks Laporan Observasi Siswa Kelas X SMA Negeri 2 Susua Tahun Pelajaran 2021/2022. *KOHESI : Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 3(2), 13–23.
- Maulia, S., & Ramadhan, S. (2020). Pengaruh Model *Discovery Learning* Terhadap Keterampilan Menulis Teks Laporan Hasil Observasi Siswa Kelas VII SMP Negeri 15 Padang. *Jurnal Pendidikan Bahasa dan Sastra Indonesia*, Vol. 9 No. 2 Juni 2020; Seri A 64-71, 1–23. DOI:10.24036/108992-019883
- Nursidik, D. (2021). Penerapan Model Problem Based Learning (PBL) dalam Pembelajaran Menulis Teks Laporan Hasil Observasi dan Dampaknya terhadap Kemampuan Berpikir Kritis Peserta Didik SMPN 2 Kalipucang. *Wistara: Jurnal Pendidikan Bahasa Dan Sastra*, 2(2), 168-182.
- Oktaviani, O. (2021). Kemampuan Menulis Teks Laporan Hasil Observasi Siswa Sekolah Menengah Pertama. *Jurnal Pendidikan Bahasa Indonesia*, 6(2), 24–31.

- Permata Sari, S. (2018). Pengembangan Modul Berbasis Metode *Discovery Learning* untuk Pembelajaran Menulis Teks Cerpen Siswa Kelas XI SMA Negeri 3 Bukit Tinggi. *Journal of Residu*, 2(3), 67–77.
- Prasetyo, O., Sugiharto, B., & Harlita, H. (2025). Improving Students' Scientific Writing Skills through Discovery Learning in Science Learning: A Systematic Review. *Jurnal Penelitian Pendidikan IPA*, 11(5), 1–9. <https://doi.org/10.29303/jppipa.v11i5.6789>
- Razak, A. (2000). *Membaca Pemahaman: Teori dan Aplikasi Pengajaran*. Pekanbaru: Ababil Press.
- Razak, A. (2017). *Menggapai Mixed Methods Bidang Pembelajaran Bahasa Indonesia*. Pekanbaru: Ababil Press.
- Rizal, M., & Rindayu, A. S. (2020). Analisis Kesulitan Siswa dalam Menulis Teks Laporan Hasil Observasi. *Jurnal Penelitian Tindakan Kelas*, 1(3), 173–180. DOI: <https://doi.org/10.36709/bastra.v1i1.1863>
- Rusdianto, R., Supeno, S., Nuha, U., Fadilah, R. E., & Irawan, A. (2023). The Effect of Question Prompt Scaffolding-Based Student Worksheet on Scientific Writing Skills of Junior High School Students in Science Learning. *Jurnal Penelitian Pendidikan IPA*, 10(7), 3998–4003. <https://doi.org/10.29303/jppipa.v10i7.8091>
- Susila, L. P. A. L. (2020). Penerapan Model Pembelajaran *Discovery Learning* pada Materi Teks Proposal dalam Meningkatkan Hasil Belajar Bahasa Indonesia Siswa Kelas XI MIPA 4 SMA Negeri 7 Denpasar. *Widyadari*, 21(2), 500–510).
- Yenti, N., Ramadhanti, D., & Laila, A. (2022). Pengaruh Penggunaan Model *Discovery Learning* terhadap Keterampilan Menulis Teks Eksposisi. *Jurnal Pembelajaran Bahasa dan Sastra*, 1(1), 93–102. <https://doi.org/10.55909/jpbs.v1i1.16>