

Developing PowerPoint Using Canva in Teaching Reading Descriptive Texts Through the Scientific Approach for Eighth-Grade Students

Ira Larasati¹, Rissa San Rizqiya², Hendra Husnussalam³

IKIP Siliwangi

¹ iralarasati08@gmail.com, ² rissa.sr@ikipsiliwangi.co.id,

³ hendrahussnussalam@ikipsiliwangi.co.id

Abstract

This study aimed to develop PowerPoint learning materials using Canva through the Scientific Approach in teaching reading descriptive texts for eighth-grade students. A Research and Development (R&D) methodology based on the ADDIE model was employed, encompassing five phases: Analysis, Design, Development, Implementation, and Evaluation. The participants consisted of 20 eighth-grade students from a junior high school in Gununghalu, along with two English teachers and two expert validators. Data were collected through interviews, field notes, validation sheets, observation checklists, questionnaires, and pre-test and post-test instruments. The interview results revealed the need for more engaging learning media to improve students' reading comprehension. Field notes were used to document revisions and improvements throughout the development process. The validation results showed that the developed materials were classified as Very Feasible by both media and material experts, with percentages ranging from 87.5% to 100%. The observation checklist results indicated that the learning process was implemented effectively, with scores ranging from 80% to 100%. In addition, the questionnaire findings indicated that both teachers and students gave very positive responses to the developed materials. To evaluate the effectiveness of the product, the pre-test and post-test data were analyzed using IBM SPSS Statistics version 26. The results showed an average gain of 9.65 points, supported by a paired-samples t -test result of $t(19) = -11.113$, $p < .001$, indicating a statistically significant improvement in students' reading comprehension. In conclusion, the developed materials were feasible, effective, and well accepted by students and teachers as interactive learning media for teaching reading descriptive texts.

Keywords: Canva Based PowerPoint; Scientific Approach; Reading Comprehension

INTRODUCTION

Reading comprehension is an essential skill in learning English because it supports students in understanding written information and developing their language abilities. According to Abbasi (2022), reading comprehension helps students expand their vocabulary, interpret meaning, and identify main ideas and supporting details. Among the various text types taught in junior high schools, descriptive texts are particularly important because they enable students to describe people, places, animals, and objects clearly and systematically (Siregar & Harida, 2021). However, understanding descriptive texts remains a challenge for many students. Yusnita & Isna (2025) found that students often struggle due to limited vocabulary, a weak understanding of text structure, and low learning motivation. Similarly, Fitri et al. (2022) reported that students encounter difficulties in identifying topic sentences, analyzing main ideas, and making inferences from texts. Rezaee et al. (2025) also found that students often struggle to infer meaning and identify key details, while Corry et al. (2024) noted that limited vocabulary and poor understanding of text organization negatively affect reading comprehension. Likewise,

Akbar & Ginting (2023) found that students with limited vocabulary often experience difficulties in understanding and expressing ideas, which can hinder their comprehension of descriptive texts. These findings highlight the need for instructional innovations that can facilitate students' understanding of descriptive texts more effectively.

To overcome these challenges, several studies have examined various teaching methods and learning media to improve students' reading skills. Pratolo et al. (2025) indicated that the Think-Pair-Share strategy strengthens students' reading comprehension and learning motivation through collaborative learning activities. Furthermore, Reciprocal Teaching strategies, including predicting, questioning, clarifying, and summarizing, effectively improved students' reading comprehension (Islam & Hamdani, 2022). Likewise, Wang (2023) reported that student-centered learning approaches enhance reading achievement by encouraging students to take an active role in learning activities. In addition to teaching methods, digital media have been widely used to support English language learning. According to Yuliana et al. (2023), the integration of digital learning media increases students' motivation and creates more interactive learning experiences. Moreover, interactive PowerPoint media positively influence students' learning interest (Kesuma et al., 2025), while Agustina & Sutikno (2024) demonstrated that PowerPoint-based instructional materials effectively support language learning achievement among junior high school students. These findings suggest that integrating appropriate teaching strategies with digital learning media can provide more interactive and meaningful learning experiences.

Among various digital tools, Canva has become one of the most popular platforms for developing instructional media, including PowerPoint presentations. Puspita et al. (2023) found that Canva contributed positively to students' reading comprehension, while Pinandhita & Yasin (2025) reported that microlearning materials developed using Canva enhanced students' motivation and reading achievement. Canva is also considered a practical platform because it provides a wide range of templates, visual elements, and design features that enable teachers to create engaging instructional materials efficiently (Sari et al., 2023). In addition, Wijayanti (2022) highlighted that Canva supports active and participatory learning by encouraging students' creativity and engagement. This finding is supported by Deliana et al. (2023) who reported high levels of student satisfaction and engagement when Canva-based learning media were implemented. Furthermore, Catubig et al. (2024) found that Canva contributed to the development of students' visual literacy skills and functioned as an effective visual communication tool in educational settings. These findings indicate that Canva has strong potential for developing visually appealing PowerPoint learning materials to support reading instruction.

Another approach that has been widely implemented in English language teaching is the Scientific Approach. According to Novitasari et al. (2022), this approach consists of five stages: observing, questioning, collecting information, associating, and communicating. Fadhillah & Ginting (2021) found that the Scientific Approach increased students' participation and understanding through systematic learning activities. Similarly, Siregar & Dilla (2024) reported that the Scientific Approach enhanced students' reading comprehension. In addition, Melouka & Hayat (2022) found that the Scientific Approach contributed to students' self-confidence and cognitive development through active learning experiences. The Scientific Approach is closely associated with student-centered learning because it encourages learners to construct knowledge through inquiry and exploration. Furthermore, Nurfajriah et al. (2023) reported that learning materials developed based on the Scientific Approach were suitable for classroom

instruction, indicating that this approach can be effectively integrated into digital learning media. Therefore, integrating the Scientific Approach into digital learning media may provide students with well-organized, meaningful learning activities.

Although previous studies have explored teaching methods, digital media, Canva, PowerPoint, and the Scientific Approach in teaching reading, these elements have generally been examined separately. Research on the development of Canva-based PowerPoint learning materials integrated with the Scientific Approach for teaching reading descriptive texts remains limited, particularly on studies employing a systematic instructional design model such as ADDIE (Branch, 2009). Therefore, this study aimed to develop Canva-based PowerPoint learning materials using the Scientific Approach for teaching reading descriptive texts to eighth-grade students. Specifically, this study describes the development process, evaluates the feasibility of the developed materials, and investigates teachers' and students' responses to their implementation. It is expected that the developed learning media will provide an engaging and meaningful instructional tool to support the teaching of reading descriptive texts.

METHOD

Cooper (1990) and Okpatrioka (2023) defined Research and Development (R&D) as a systematic process of developing new products or improving existing one through research and innovation. Based on these definitions, a Research and Development (R&D) method was employed in this study using the ADDIE instructional design model to develop Canva-based PowerPoint learning materials through the Scientific Approach for teaching reading descriptive texts. The ADDIE model was selected because it provides a systematic development process consisting of five phases: Analysis, Design, Development, Implementation, and Evaluation, which guide the development of effective instructional materials. According to Branch (2009), the ADDIE model enables researchers to design, develop, implement, and evaluate learning media through a structured and iterative process. Therefore, the ADDIE model was considered appropriate for guiding the development of the learning materials in this study.

The participants in this study were 20 eighth-grade students from a junior high school in Gununghalu. One class was selected based on the English teacher's recommendation using purposive sampling. All participants had previously learned descriptive texts but had not been taught using Canva-based PowerPoint integrated with the Scientific Approach, making them suitable for this study. In addition, media and material experts were involved to evaluate the feasibility of the developed learning materials.

Data were collected using several instruments to support the development and evaluation of the learning materials. During the analysis stage, semi-structured interviews were conducted with the English teacher to identify students' needs and difficulties in learning descriptive texts. In the design stage, field notes were used to document important information, suggestions, and revisions related to the design of the PowerPoint materials. During the development stage, validation sheets were used to evaluate the feasibility of the developed PowerPoint materials, as assessed by media and material experts. During the implementation stage, observation checklists were used to monitor the teaching and learning process. Furthermore, a questionnaire was administered to gather teachers' and students' responses to the developed materials. To support the findings, pre-test and post-test instruments consisting of 10 multiple-choice questions and 10 open-ended questions were administered to evaluate students' reading comprehension of descriptive texts, including their understanding of main ideas, specific details, vocabulary, and text structure, before and after the implementation.

Data were analyzed using IBM SPSS Statistics version 26 to obtain accurate and reliable findings. Descriptive statistics, including the mean and standard deviation, were used to summarize students' reading comprehension scores. A Shapiro–Wilk normality test was conducted to examine the distribution of the pre-test and post-test data. Subsequently, a paired-samples *t*-test was performed to compare the pre-test and post-test scores and determine whether there was a statistically significant difference after the implementation of the developed learning materials.

In addition, the data obtained from the validation sheets, questionnaires, and observation checklists were analyzed using a four-point Likert scale. The scores were then converted into percentages using the following formula: $P = \frac{\sum x}{\sum x_i} \times 100\%$ and interpreted according to the established feasibility criteria.

RESULTS AND DISCUSSION

Results

This study followed the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) to develop PowerPoint learning materials using Canva through the Scientific Approach in teaching reading descriptive texts for eighth-grade students. The results of each stage are presented below.

1. Analysis

The analysis stage aimed to identify students' needs and difficulties in learning descriptive texts. Data were collected through a semi-structured interview with the English teacher. The interview covered five main aspects: teaching methods, students' learning difficulties, the learning media currently used, the effectiveness of the existing media, and the need to develop Canva-based PowerPoint learning materials.

According to the interview findings, the teacher stated that the learning process primarily relied on textbooks, with instruction consisting of reading the material, explaining the content, and asking students to write descriptive texts. As the teacher explained, *"I usually use the textbook as the main learning source. Students read the material, I explain it, and then they are asked to write a descriptive text"* (Teacher 1). The teacher also reported that students often forgot previously learned material in subsequent lessons, indicating limited retention and comprehension. Furthermore, instruction was conducted using textbooks only, without additional digital or visual media to enhance students' engagement. The teacher stated *"The textbook helps students understand the material, but they often forget it in the next meeting, and I think additional learning media would make the lesson more interesting"* (Teacher 2). Although students were able to understand and produce descriptive texts using the textbook, the teacher considered the existing instructional media insufficient to support deeper comprehension.

Furthermore, the teacher expressed positive support for the development of Canva-based PowerPoint learning materials, stating that such media would be beneficial and could serve as a useful reference for other teachers. After being introduced to the developed product, the teacher responded positively and stated that the PowerPoint presentation was well designed and suitable for classroom instruction.

2. Design

The design stage involved planning and developing the Canva-based PowerPoint learning materials based on the findings from the analysis stage. Field notes were used to document important decisions, suggestions, and revisions related to the design of the instructional materials.

Based on the consultation results, two main revisions were made: (1) revising the paragraph content in the PowerPoint by correcting language errors and (2) revising several Canva design elements to ensure their suitability with the instructional content.



Figure 1. Revisions of the PowerPoint Materials Based on Consultation Results

These revisions contributed to the finalization of the product, including the learning objectives, slide layout, visual design, and the integration of the five stages of the Scientific Approach: observing, questioning, collecting information, associating, and communicating.

3. Development

The development stage involved constructing the Canva-based PowerPoint materials and evaluating their feasibility through expert validation. Two experts were involved to assess the product using validation sheets, measured with a Likert scale and converted into percentages using the formula $P = \frac{\sum x}{\sum xi} \times 100$

a. Media Expert Validation

The media expert evaluated 10 items related to the visual and technical quality of the developed PowerPoint materials.

Table 1. Media Expert Validation Result

No	$\sum x$	$\sum xi$	Percentage	Category
1	8	8	100%	Very Feasible
2	8	8	100%	Very Feasible
3	8	8	100%	Very Feasible

4	8	8	100%	Very Feasible
5	7	8	87.5%	Very Feasible
6	8	8	100%	Very Feasible
7	7	8	87.5%	Very Feasible
8	7	8	87.5%	Very Feasible
9	7	8	87.5%	Very Feasible
10	8	8	100%	Very Feasible

The results showed that all items were categorized as “Very Feasible,” with percentages ranging from 87.5% to 100%. These findings indicate that the developed PowerPoint materials met appropriate standards regarding visual design, layout, readability, and technical presentation.

b. Material Expert Validation

The material expert evaluated 13 items related to the content quality, learning objectives, and instructional suitability of the materials. These results showed that all items were categorized as “Very Feasible,” with percentages ranging from 87.5% to 100%.

Table 2. Material Expert Validation Result

No	Σx	Σxi	Percentage	Category
1	7	8	87.5%	Very Feasible
2	7	8	87.5%	Very Feasible
3	7	8	87.5%	Very Feasible
4	8	8	100%	Very Feasible
5	8	8	100%	Very Feasible
6	8	8	100%	Very Feasible
7	8	8	100%	Very Feasible
8	8	8	100%	Very Feasible
9	8	8	100%	Very Feasible
10	7	8	87.5%	Very Feasible
11	7	8	87.5%	Very Feasible
12	8	8	100%	Very Feasible
13	7	8	87.5%	Very Feasible

These results suggest that the developed materials were appropriate in terms of content accuracy, instructional objectives, and alignment with the Scientific Approach for eighth-grade students. These results align with Fadhilah & Ginting (2021) who found that the Scientific Approach can support students’ understanding and engagement through structured learning stages.

4. Implementation

The implementation stage involved using the developed PowerPoint materials in actual classroom instruction. Data were obtained through an observation checklist, pre-test and post-test, and questionnaires administered to teachers and students.



Figure 2. Implementation of the Developed PowerPoint Materials During Classroom Instruction

a. Observation Checklist

The classroom activities monitored using an observation checklist consisting of 15 items measured with a Likert scale and converted into percentages.

Table 3. Observation Checklist Result

No	Σx	Σxi	Percentage	Category
1	5	5	100%	Very good
2	4	5	80%	Good
3	4	5	80%	Very good
4	5	5	100%	Very good
5	4	5	80%	Good
6	5	5	100%	Very good
7	4	5	80%	Good
8	4	5	80%	Good
9	4	5	80%	Good
10	5	5	100%	Very good
11	4	5	80%	Good
12	5	5	100%	Very good
13	5	5	100%	Very good
14	5	5	100%	Very good
15	5	5	100%	Very good

5. Evaluation

The evaluation stage involved reviewing all data collected during the implementation stage to determine the overall quality and feasibility of the developed PowerPoint materials. The pre-test and post-test data were analyzed using SPSS as supporting evidence for the product evaluation process.

a. Normality Test

The Shapiro-Wilk test was performed to examine whether the pre-test and post-test scores followed a normal distribution.

Table 4. Normality Test Result

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pretest	.140	20	.200*	.959	20	.518

posttest	.133	20	.200*	.957	20	.489
----------	------	----	-------	------	----	------

b. Descriptive Statistics

The descriptive statistics showed that the mean score of the post-test ($M = 81.45$, $SD = 8.846$) was higher than the mean score of the pre-test ($M = 71.80$, $SD = 7.871$), indicating an average gain of 9.65 points after the implementation of the developed materials.

Table 5. Descriptive Statistic Result

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
pretest	20	59	86	71.80	7.871	61.958
posttest	20	65	95	81.45	8.846	78.261
Valid N (listwise)	20					

c. Paired Sample T-Test

A paired sample t-test was used to analyze the difference between pre-test and post-test scores as supporting evidence for the product evaluation.

Table 6. Paired Sample T-Test Result

		Paired Differences			95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error	Lower	Upper			
Pair 1	pretest posttest	-9.650	3.884	.868	-11.468	-7.832	-11.113	19	.000

The results showed a mean difference of -9.650 ($SD = 3.884$), $t(19) = -11.113$, $p = .000$. Since the significance value was lower than .05, there was a statistically significant difference between students' scores before and after using the developed materials.

d. Teacher and Student Questionnaire Responses

Questionnaires were distributed to gather teachers' and students' responses toward the developed PowerPoint materials.

1. Student Questionnaire

The student questionnaire consisted of 10 items with a maximum score of 100 for each item. The results showed that all items were categorized as "Very Positive," with percentages ranging from 84% to 98%.

Table 8. Student Questionnaire Result

No	Σx	Σxi	Percentage	Category
1	96	100	96%	Very Positive
2	88	100	88%	Very Positive
3	95	100	95%	Very Positive
4	90	100	90%	Very Positive
5	88	100	88%	Very Positive

6	84	100	84%	Very Positive
7	90	100	90%	Very Positive
8	96	100	96%	Very Positive
9	98	100	98%	Very Positive
10	87	100	87%	Very Positive

2. Teacher Questionnaire

The teacher questionnaire consisted of 10 items, with each item having a maximum score of 10 obtained from two teachers $\times$ five maximum Likert score points. The results showed that nine items obtained 100%, while one item obtained 90%. All items were categorized as “Very Positive.”

Table 9. Teacher Questionnaire Result

No	Σx	Σxi	Percentage	Category
1	10	10	100%	Very Positive
2	10	10	100%	Very Positive
3	10	10	100%	Very Positive
4	10	10	100%	Very Positive
5	10	10	100%	Very Positive
6	10	10	100%	Very Positive
7	10	10	100%	Very Positive
8	10	10	100%	Very Positive
9	10	10	100%	Very Positive
10	9	10	90%	Very Positive

These results indicate that the teachers considered the developed materials suitable, well structured, and supportive for teaching reading descriptive texts in the classroom.

Discussion

The findings of this study indicate that the Canva-based PowerPoint materials developed through the Scientific Approach were feasible and effective for teaching reading descriptive texts to eighth-grade students. The expert validation results categorized the developed materials as “Very Feasible,” while the implementation results demonstrated a significant improvement in students’ reading comprehension, as reflected in the increase from the pre-test mean score of 71.80 to the post-test mean score of 81.45. In addition, both students and the teacher expressed highly positive responses toward the developed materials. These findings suggest that the integration of Canva-based PowerPoint materials and the Scientific Approach provided meaningful learning experiences that supported students’ reading comprehension.

The improvement in students’ reading comprehension can be attributed to several characteristics of the developed materials. First, the Canva-based PowerPoint materials presented descriptive texts through a combination of written information and visual representations, including images, colors, icons, and organized layouts. Such visual supports helped students identify key information, understand textual descriptions more clearly, and maintain their attention throughout the learning process. Since descriptive texts require students to recognize characteristics, details, and specific information about people, animals, places, or objects, visual representations helped students in connecting textual information with concrete illustrations. As a result, students were able to comprehend the texts more effectively and retain information more successfully.

The findings can be explained through multimedia learning theory proposed by Mayer (2021), which states that students learn more effectively from words and pictures together than from words alone. According to this theory, meaningful learning occurs when learners actively process information through verbal and visual channels. The Canva-based PowerPoint materials integrated textual content with relevant visual elements, enabling students to process information through multiple representations simultaneously. This combination helped reduced cognitive overload, facilitated information organization, and supported deeper comprehension. Therefore, the significant improvement in students' reading comprehension scores can be explained by the effective integration of multimedia elements that enhanced students' cognitive processing during learning activities.

In addition to the multimedia features, the integration of the Scientific Approach contributed to students' reading achievement. The learning activities were designed based on the stages of observing, questioning, collecting information, associating, and communicating. These stages encouraged students to become active participants in the learning process rather than passive recipients of information. Through observing visual and textual information, asking questions, analyzing content, and communicating their understanding, students were given opportunities to construct knowledge actively. This finding supports Fadhillah & Ginting (2021), who reported that the Scientific Approach enhances students' engagement and understanding through systematic learning activities. Similarly, Siregar & Dilla (2024) found that the Scientific Approach contributes positively to students' reading comprehension by promoting active learning and critical thinking.

The findings of this study are also consistent with previous research and development studies. Puspita et al. (2023) reported that Canva-supported instructional materials improved students' reading comprehension skills by providing engaging and visually attractive learning experiences. Likewise, Nurfajriah et al. (2023) found that learning materials developed through the Scientific Approach were feasible and effective for classroom implementation. Similar to these studies, the present research resulted in instructional materials that were validated by experts, positively received by users, and effective in supporting student learning. However, the current study extends previous research by integrating Canva-based PowerPoint materials with the Scientific Approach specifically for teaching reading descriptive texts to eighth-grade students through a systematic ADDIE development process.

The highly positive responses from students and the teacher can be explained by the characteristics of the developed materials. For students, the attractive visual design, interactive activities, and clear organization of content likely increased their motivation and engagement during lessons. The use of Canva-based PowerPoint materials created a learning environment that was more interesting and enjoyable than conventional textbook-based instruction. Furthermore, the visual supports helped students understand descriptive texts more easily, which likely increased their confidence in participating during classroom activities. For the teacher, the developed materials provided structured instructional procedures that aligned with the Scientific Approach, making the teaching process more organized and effective. These factors help explain why both students and the teacher expressed highly positive perceptions toward the developed learning materials.

Overall, the findings indicate that the Canva-based PowerPoint materials developed through the Scientific Approach successfully addressed the learning needs identified during the analysis

stage. The combination of multimedia elements and student-centered learning activities contributed to improved reading comprehension, increased engagement, and positive learning experiences. Therefore, the developed materials can be considered an effective instructional medium for teaching reading descriptive texts to eighth-grade students.

CONCLUSION

This study aimed to develop Canva-based PowerPoint materials through the Scientific Approach in teaching reading descriptive texts for eighth-grade students using the ADDIE model. The findings showed that the development process was successfully conducted through the five ADDIE stages: analysis, design, development, implementation, and evaluation. In the analysis stage, students were found to experience difficulties in vocabulary mastery, text comprehension, and learning motivation. Based on these needs, the researcher developed interactive PowerPoint materials using Canva integrated with the stages of the Scientific Approach.

The feasibility results showed that the developed materials were categorized as “Very Feasible” based on both media and material expert validations. In addition, the implementation results indicated that the learning process could be conducted effectively, and both teachers and students gave very positive responses toward the developed materials. The pre-test and post-test results also showed improvement in students’ reading comprehension scores after the implementation of the materials, indicating that the developed media contributed positively to students’ understanding of descriptive texts.

Despite these positive findings, this study still had several limitations. The research was conducted in only one class with a limited number of participants, which may limit the generalization of the findings. In addition, the implementation period was relatively short, so the long-term effectiveness of the developed materials was not fully examined. Therefore, future researchers are recommended to involve more participants, apply the materials in different schools or grade levels, and conduct longer implementation periods to obtain broader findings. Future studies may also examine the effectiveness of the developed materials through experimental research designs, explore their implementation in different learning contexts, and incorporate other digital learning media or additional qualitative data, such as interviews and classroom observations, to gain deeper insights into students’ learning experiences.

ACKNOWLEDGMENTS

All praise and gratitude are belong to Allah SWT for His blessings and guidance during the completion of this research. The author would like to express sincere appreciation to the lecturers for their valuable guidance, advice, and encouragement, which greatly contributed to the completion of this study. Appreciation is also extended to friends, English teachers, and all participants who have provided support, assistance, and motivation during the research and writing process. The author realizes that this research paper still contains several limitations. Therefore, constructive suggestions and feedback are highly appreciated for future improvements. It is hoped that this research will be beneficial for researchers and related studies in the future.

REFERENCES

- Abbasi, P. (2022). Effect of cognitive and metacognitive strategy developing reading comprehension emphasizing students' linguality. *Research Square*. <https://doi.org/10.21203/rs.3.rs-1218693/v1>
- Agustina, A., & Sutikno, S. (2024). Development of writing learning materials and Indonesian language learning media using Microsoft PowerPoint for Grade VII students at UPTD SMP Negeri 2 Pulau Rakyat. *International Journal of Educational Research Excellence*, 3(1), 219–228. <https://doi.org/10.55299/ijere.v3i1.860>
- Akbar, F., & Ginting, P. (2023). Teaching method in writing descriptive text: A descriptive study at the seventh-grade students of Thammislam Foundation School academic year 2023. *Cybernetics: Journal Educational Research and Social Studies*, 4(3). <http://pusdikra-publishing.com/index.php/jrss>
- Branch, R. M. (2009). *Instructional design: The ADDIE approach*. Springer. <https://doi.org/10.1007/978-0-387-09506-6>
- Catubig, M. J. A., Kilat, R. V. B., Laurito, M. E., Patoc, T. M. T., & Valle, L. C. (2024). Visual literacy in the lived experiences of BSED students in utilizing Canva. *Journal of Educational and Social Research*, 14(4), 117–131. <https://doi.org/10.36941/jesr-2024-0090>
- Cooper, R. G. (1990). Stage-gate systems: A new tool for managing new products. *Business Horizons*, 33(3), 44–54. [https://doi.org/10.1016/0007-6813\(90\)90040-I](https://doi.org/10.1016/0007-6813(90)90040-I)
- Corry, I., Sigalingging, G. B., & Tampubolon, J. (2024). Analyzing students' reading comprehension on descriptive text at SMP Pangeran Antasari Medan. *English Language Teaching Prima Journal*, 6(1).
- Deliana, A., Romalinca, R., Omerlin, O., Krisbet, K., & Meldawati, M. (2023). Efektivitas pemanfaatan Canva sebagai media pembelajaran luring. *Multiverse: Open Multidisciplinary Journal*, 2(2), 298–303. <https://doi.org/10.57251/multiverse.v2i2.1258>
- Fitri, W., Eliza, E., Irwandi, I., & Safitri, L. (2022). An analysis of students' difficulties in reading comprehension of descriptive text. *Journal of English Language and Education*, 7(2), 52–67. <https://doi.org/10.31004/jele.v7i2.276>
- Islam, A. H., & Hamdani, M. (2022). The effectiveness of reciprocal teaching method on students' reading comprehension in descriptive text. *Journal of Academia in English Education*, 4(1), 71–79. <https://doi.org/10.32505/jades.v3i2/4451>
- Kesuma, S. K., Wuriyani, E. P., & Matondang, Z. (2025). Development of interactive digital media to improve descriptive writing learning outcomes. *Jurnal Ilmiah Keguruan*, 22(4), 2145–2160. <https://doi.org/10.64014/jik.v22i4.93>
- Mayer, R. E. (2021). *Multimedia learning* (3rd ed.). Cambridge University Press. <https://doi.org/10.1017/9781316941355>
- Melouka, Z., & Hayat, A. (2022). A constructivist approach to teaching scientific content to university students. *Technium Social Sciences Journal*, 36, 191–197. <https://doi.org/10.47577/tssj.v36i.7544>
- Novitasari, D., Petrus, I., & Vianty, M. (2022). The implementation of scientific approach of the 2013 curriculum at state junior high schools. *English Review: Journal of English Education*, 10(2), 521–532. <https://doi.org/10.25134/erjee.v10i2.6252>
- Nurfajriah, N., Suzanne, N., & Munir, S. (2023). Developing scientific approach-based e-module assisted by Ksoft Flipbook Maker application for tenth-grade senior high school students. *International Journal of Educational Best Practices*, 7(1), 73–91. <https://doi.org/10.32851/ijebp.v7n1.p73-91>
- Fadhilah, S. N. (2021). *The application of scientific approach in teaching reading comprehension for the tenth-grade students of SMA PABA Binjai* (Undergraduate thesis, State University of Medan).

- Okpatrioka. (2023). Research and development (R&D) penelitian yang inovatif dalam pendidikan. *Dharma Acariya Nusantara: Jurnal Pendidikan, Bahasa dan Budaya*, 1(1), 86–100. <https://doi.org/10.47861/jdan.v1i1.154>
- Pinandhita, F., & Yasin, M. H. M. (2025). Optimizing students' reading skills through microlearning with Canva: A digital approach in ELT. *International Journal of Recent Educational Research*, 6(2), 470–481. <https://doi.org/10.46245/ijorer.v6i2.807>
- Pratolo, B. W., Bao, D., & Palaguna, S. (2025). Enhancing reading comprehension and motivation through Think-Pair-Share: Classroom action research in an Indonesian EFL context. *English Language Teaching Educational Journal*, 8(1), 54–65. <https://doi.org/10.12928/eltej.v8i1.13992>
- Puspita, R. D., Wardani, D. S., & Rabbani, S. (2023). Development of teaching materials to improve reading comprehension skills for fifth-grade students: Canva app supported. *JMIE (Journal of Madrasah Ibtidaiyah Education)*, 6(2), 163–176. <https://doi.org/10.32934/jmie.v6i2.442>
- Rezaee, H., Rezaei, S., & Rezaee, A. (2025). Reading comprehension challenges in Iranian EFL classrooms. *English Language Teaching and Linguistics Studies*, 7(5), 47–59. <https://doi.org/10.22158/eltls.v7n5p47>
- Sari, M. I., Utari, S. D., & Arfiandhani, P. (2023). Creating English learning media using Canva: EFL students' perspective. *Teaching English as a Foreign Language Journal*, 2(2), 85–96. <https://doi.org/10.12928/tefl.v2i2.467>
- Siregar, A., & Dilla, S. (2024). The impact of using a scientific approach on reading comprehension of seventh-grade students. *P-TELL-US Journal*, 10(1). <https://doi.org/10.22202/tus.2024.v10i1.7949>
- Siregar, W. S., & Harida, E. S. (2021). Students' reading comprehension in descriptive text. *English Education: English Journal for Teaching and Learning*, 9(1), 77–86. <https://doi.org/10.24952/ee.v9i1.4245>
- Wang, L. (2023). The impact of student-centered learning on academic motivation and achievement: A comparative research between traditional instruction and student-centered approach. *Journal of Education, Humanities and Social Sciences*, 22, 131–136. <https://doi.org/10.54097/ehss.v22i.12463>
- Wijayanti, E. (2022). Teaching English by using Canva: Students' and lecturers' voice. *English Franca: Academic Journal of English Language and Education*, 6(2), 411–428. <https://doi.org/10.29240/ef.v6i2.5709>
- Yuliana, D., Baijuri, A., Suparto, A. A., Seituni, S., & Syukria, S. (2023). Pemanfaatan aplikasi Canva sebagai media video pembelajaran kreatif, inovatif, dan kolaboratif. *Jurnal Pendidikan Teknologi Informasi (JUKANTI)*, 6(2), 247–257.
- Yusnita, & Isna, N. (2025). Students' difficulties in reading descriptive text at SMP 1 Blangpidie. *ELTIN Journal: Journal of English Language Teaching in Indonesia*, 13(1), 13–22. <https://e-journal.stkipsiliwangi.ac.id/index.php/eltin/article/view/4810>