

THE EFFECTIVENESS OF THE RADEC LEARNING MODEL IN ENHANCING FIFTH-GRADE STUDENTS' READING COMPREHENSION SKILLS OF PROCEDURAL TEXTS

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Abstract

This study aims to examine the effectiveness of the RADEC (Read-Answer-Discuss-explain-Create) learning model in improving fifth-grade elementary students' reading comprehension of procedural texts compared to conventional instruction. A quasi-experimental design with a non-equivalent group pretest-posttest method was applied. The participants consisted of fifth-grade students from two elementary schools in Kuningan Regency, divided into experimental and control groups. Data were collected through pretest and posttest, then analyzed using an independent sample *t*-test assisted by Jeffreys's Amazing Statistics Program (JASP). The results showed a statistically significant difference in improvement between the two groups, as indicated by a *p*-value of 0.001 (sig. 2-tailed < 0.05). These findings suggest that the RADEC model is effective in enhancing students' reading comprehension, especially in understanding procedural texts, when compared to conventional learning. The implication of this research is that the RADEC learning model has the potential to be adopted as an innovative learning model to support literacy development at the elementary school level.

Keywords: reading comprehension skills; RADEC learning model; elementary school students

Abstrak

Penelitian ini bertujuan untuk menguji efektivitas model pembelajaran RADEC (*Read-Answer-Discuss-Explain-Create*) dalam meningkatkan kemampuan membaca pemahaman materi teks prosedur pada siswa kelas V sekolah dasar dibandingkan dengan pembelajaran konvensional. Desain penelitian yang diaplikasikan adalah eksperimen semu dengan metode *non-equivalent Group Pretest Posttest*. Partisipan penelitian terdiri atas siswa kelas V dari dua sekolah dasar di Kabupaten Kuningan yang terbagi menjadi kelompok eksperimen dan kelompok kontrol. Data diperoleh melalui tes awal dan tes akhir, kemudian dianalisis menggunakan uji *independent sample t-test* berbantuan aplikasi *Jeffreys's Amazing Statistic Program* (JASP). Hasil penelitian menemukan bahwa terdapat perbedaan peningkatan yang signifikan secara statistik antara kedua kelompok yang ditunjukkan melalui nilai *p-value* = 0.001 (sig. 2-tailed < 0.05). Hal ini mengindikasikan bahwa model RADEC terbukti efektif dalam meningkatkan kemampuan membaca pemahaman siswa dibandingkan pembelajaran konvensional, khususnya pada materi teks prosedur. Implikasi dari penelitian ini adalah model pembelajaran RADEC berpotensi untuk diadopsi sebagai salah satu model pembelajaran inovatif dalam penguatan literasi pada jenjang sekolah dasar.

Kata Kunci: Kemampuan membaca pemahaman; model pembelajaran RADEC; siswa sekolah dasar.

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Introduction

Education plays a vital role in enhancing the quality of human resources by fostering critical thinking, literacy, and adaptability to 21st-century challenges (Herlambang, 2018; Tilaar, 2015). One of the key foundations of education is the development of literacy skills, especially reading, which serves as the basis for students' academic achievement (Quinn & Traga Philippakos, 2023). Reading is not limited to word recognition; it also involves the ability to interpret,

analyse, and evaluate information within a text (Abidin, 2012; Ceyhan & Yildiz, 2021). According to Somadayo (2011), reading comprehension is an active cognitive process in which construct meaning by integrating both explicit and implicit information from the text.

Reading comprehension skills are a crucial aspect of students' cognitive development. However, Indonesian students' reading comprehension performance remains low. In 2016, the Indonesian National Assessment Program (INAP) reported that most elementary students were in the low to moderate categories of reading literacy (Kementerian Pendidikan dan Kebudayaan, 2019). Likewise, the Progress in International Reading Literacy Study (PIRLS) in 2011 ranked Indonesia 42nd out of 45 participating countries, with a mean score of 428 out of 500 (Thompson et al., 2012).

One type of text commonly taught in elementary school is procedural texts. This genre is crucial for developing students' ability to understand sequential steps in performing a task (Maya & Saragih, 2021; Wijayanti et al., 2015). By studying procedural texts, students can practice practical skills in daily tasks. In addition, it helps students achieve a goal. However, preliminary observations at two elementary schools in Kuningan Regency show that fifth-grade students still face difficulties in understanding the structure and content of procedural texts. Students needed to read the texts multiple times to grasp the meaning, struggled to answer content-related questions, summarize information, and reconstruct ideas from the text. These challenges are reflected in the pretest results, which showed that students' mean scores across several key comprehension indicators, including identifying the purpose of the text, understanding the logical flow of steps, evaluating text quality, and reconstructing ideas, still indicated limited understanding. This suggests that students' overall understanding of procedural texts remained limited prior to the intervention, and that existing instructional approaches have not effectively addressed these gaps.

Students' difficulties in reading comprehension must be addressed promptly, considering the essential role of reading in overall literacy development. A classroom learning process that facilitates students' engagement in reading and writing activities has significant implications for enhancing their literacy skills (Quinn & Traga Philippakos, 2023). One of the literacy-oriented learning models that actively involves students is the RADEC learning model. RADEC is an acronym for five instructional stages: Read, Answer, Discuss, Explain, and Create (Sopandi et al., 2021). In the Read stage, students are assigned to read relevant learning materials before the classroom session, aiming to build their prior knowledge. During the Answer stage, students respond to pre-learning questions based on their understanding after reading. This is followed by the Discuss stage, where students engage in small-group discussions to compare answers, exchange ideas, and agree on the most accurate responses. In the Explain stage, students are encouraged to orally present the results of their group discussions to the class. Finally, in the Create stage, students are given tasks that require them to apply their knowledge through the production of a product or project.

The RADEC learning model (*Read-Answer-Discuss-Explain-Create*) is a literacy-based approach designed to enhance conceptual understanding through active student engagement. It is rooted in constructivist theory, which emphasizes learning through experience and social interaction (Vygotsky, 1962) and behaviorist theory, which highlights the importance of reinforcement and repetition in the learning process (Hapudin, 2021; Vygotsky, 1962). RADEC also aligns with the Merdeka Curriculum, which prioritizes literacy development and character education (Fitriyah & Wardani, 2022). In addition, this learning model helps students develop 21st-century skills. Reading is a skill that can be trained. Thus, this literacy-based learning model helps students read, think, and write more effectively (Sopandi et al., 2021). In addition, the

more often students interact with reading materials, their understanding of the texts will be better (Pratama et al., 2019).

Previous studies conducted by Hasibuan et al. (2024) and Ica et al. (2024) proved that the RADEC learning model was successful in developing elementary school students' reading comprehension skills. In addition, literature research conducted by Pohan et al. (2020) stated that the RADEC learning model supports students' reading literacy skills during its implementation. Although previous studies have shown that the RADEC learning model is effective in improving elementary students' reading skills, most of these studies have focused on general reading abilities without differentiating between text types. To date, there has been limited research examining the specific impact of the RADEC model on students' comprehension of procedural texts, a genre that requires sequential thinking and understanding of structured information. Therefore, this study addresses a research gap by investigating the effectiveness of RADEC in enhancing procedural text comprehension at the elementary level.

Given this context, it is essential to evaluate how effective the RADEC learning model is in improving students' comprehension of procedural texts in elementary education. Based on the preceding explanation, this study aims to examine the effectiveness of the RADEC learning model in improving students' comprehension of procedural texts. The research question is: Is there a significant difference in the improvement of students' reading comprehension of procedural texts between those taught using the RADEC learning model and those taught using conventional instruction? The hypothesis of this study is: there is a significant difference in the improvement of students' reading comprehension of procedural texts between those taught using the RADEC learning model and those taught using conventional instruction.

Research Methods

This study uses a quantitative approach with a quasi-experimental design, specifically the non-equivalent group pretest-posttest method. This type of design was chosen because it involves natural classroom settings in which full randomization is not feasible. According to Noor (2013), a quasi-experimental design aims to estimate the effects of a treatment through real experiments, when full control over variables is not possible. In this study, the RADEC (Read-Answer-Discuss-Explain-Create) model was applied to the experimental group, while the control group received conventional instruction. The experimental group (K_1) received a pretest (O_1), followed by a treatment using the RADEC learning model (X), and then a posttest (O_2). Meanwhile, the control group (K_2) received the same pretest and posttest procedures without receiving the treatment. The design can be symbolized as follows (Creswell, 2012).

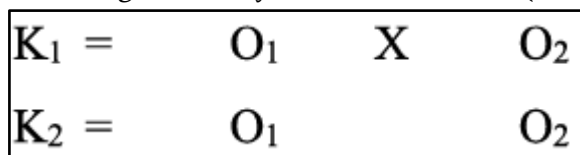


Figure 1. Research Design

This research was implemented in the odd semester of the 2024/2025 academic year in the Cilimus District, Kuningan Regency, which comprises 28 public elementary schools without any private schools. This location was chosen because students' reading comprehension skills in elementary school still need to be improved, and the RADEC learning model has never been implemented in learning to improve students' reading comprehension skills. The population included all fifth-grade students from public elementary schools in the district. The sample was

selected using random sampling. Two schools were randomly chosen, and one class from each school was randomly assigned to either the experimental group or the control group. There were no significant differences in school status or curriculum implementation, so the selected schools were considered representative of the broader population.

Data were collected through pretest and posttest for both groups using an essay-based reading comprehension test focused on procedural texts. The essay test instrument for reading comprehension was developed by the author based on eight sub-indicators derived from Somadayo (2011) and Wahyuni & Ibrahim (2012) which include: a) identifying text's purpose, b) listing tools and materials, c) linking steps to outcomes, d) comparing texts, e) evaluating content, f) predicting impact, g) reconstructing text, h) developing ideas. Content validity was assessed by three language education experts from Universitas Pendidikan Indonesia, who confirmed the instrument's appropriateness with several suggested revisions, which were implemented. Construct validity was tested through a pilot study involving students from a school not included in the main research. Out of 15 items, 13 were declared valid because the r-count exceeded the r-table value ($r\text{-count} > 0.4044$) and were retained, while 2 items were removed. Reliability testing using the Guttman Split-Half method resulted in a coefficient of 0.867, indicating high internal consistency.

The collected data were tested for normality using the Saphiro-Wilk formula. The normality test was conducted at a significance level of $\alpha = 0.05$, so the basis for decision-making is that the data are considered normally distributed if the significance value is > 0.05 (Nurgiyantoro et al., 2015). Furthermore, the homogeneity test was conducted using Levene's statistic formula with a significance level of $\alpha = 0.05$, and the basis for decision-making is that the data are considered homogeneous if the significance value is > 0.05 (Nurgiyantoro et al., 2015). After the prerequisite test was carried out, the test results were analyzed using an independent sample t-test to determine whether there was a significant difference between the experimental and control groups after the intervention. The significance level was $\alpha = 0.05$, so the basis for decision-making is to accept H_a if the sig. value (2-tailed) < 0.05 (Ramadhani & Bina, 2021). Statistical calculations in this study were performed using the Jeffreys's Amazing Statistic Program (JASP) statistical application.

In addition, an N-gain test was also conducted to determine the effectiveness of the RADEC learning model in improving students' reading comprehension. According to Hake, the interpretation of the N-gain value is described in the table below.

Table 1. Interpretation of N-gain Value

Range	N-gain Criteria
$-1,00 \leq g \leq 0,00$	Decrease
$g = 0,00$	No increase
$0,00 \leq g < 0,30$	Low
$0,30 \leq g < 0,70$	Middle
$0,70 \leq g \leq 1,00$	High

Sources: (Jumiasih et al., 2022)

Result and Discussion

This section presents the results of data analysis obtained from the essay-based test of students' reading comprehension from both groups. Data were analyzed using an independent sample t-test to determine whether there were significant differences between the experimental and control groups. The results of this study serve as evidence to support the research hypothesis and achieve the research objectives. Relevant theories and prior research are integrated to interpret and support the findings.

Table 2. Normality Test of Reading Comprehension Data from Both Groups

Data Group			Saphiro-Wilk	
n			Statistic	p-value
Experimental Group	Pretest	31	0,950	0,157
	Posttest	31	0,937	0,069
	N-Gain	31	0,962	0,322
Control Group	Pretest	31	0,971	0,543
	Posttest	31	0,959	0,266
	N-Gain	31	0,953	0,502

Based on Table 2, it can be seen that all data groups from the experimental group and the control group obtained a $p\text{-value} > 0.05$. Therefore, all data were normally distributed. Furthermore, a homogeneity test was carried out on both data groups' posttest scores and N-gain data, and the following results were obtained.

Table 3. Homogeneity Test of Posttest Score Means from Both Groups

	F	df ₁	df ₂	p
Posttest Mean	0.598	1	60	0.442
N-Gain	1.299	1	60	0.259

Based on Table 3, the Levene's test results show $p\text{-values}$ of 0.442 and 0.259 for the posttest and N-gain, respectively. This means that the data are homogeneous or come from populations with the same variance. Referring to the normality and homogeneity tests, both the posttest test data and the N-gain data in both groups meet the assumptions to be analyzed using the independent sample t-test.

The independent sample t-test was conducted on two data sets: posttest and N-gain. Testing on the posttest data aims to determine the difference in final scores between the two groups. Meanwhile, testing on the N-gain data aims to determine the difference in improvement between the experimental and control groups. Both sets of data provide a clearer picture of the effectiveness of the RADEC learning model in improving students' reading comprehension skills.

The results of the independent sample t-test analysis on the posttest mean using the JASP application are presented in the following table.

Table 4. Independent Sample t-Test on Reading Comprehension Skills Based on Posttest Mean

	t	df	p
Posttest Mean	2.843	60	0.006
N-Gain	4.285	60	< .001

Based on Table 4, it can be seen that the $p\text{-value}$ of the posttest mean scores for both groups is 0.006 (< 0.05). This indicates a difference in the posttest mean score between the two groups. The higher scores of the experimental group compared to the control group indicate that the RADEC model has a positive effect on students' comprehension of procedural texts. This finding shows that literacy-based learning with structured steps such as RADEC can increase active student involvement. This is in line with the opinion of Sopandi et al. (2021) who stated that literacy-based learning encourages students to read, think, and write more, significantly improving their reading comprehension skills.

Further analysis of the N-gain score in Table 4 also shows a $p\text{-value} < 0.001$. This result means that there is a statistically significant difference in improvement between the groups. The

experimental group showed a greater improvement than the control group, which strengthens the assumption that the RADEC model is more effective in improving students' understanding of procedural texts. The results of this statistical analysis are accompanied by a comparison of the mean scores between groups, which are visualized in the following table.

Table 5. Comparison of Mean Scores in the Experimental Group and Control Group

Groups	Pretest Mean	Posttest Mean	N-Gain	Category
Experimental	50	75	0,50	Middle
Control	50	63	0,27	Low

Based on Table 5, the experimental group showed a higher increase in the mean score, from 50 in the pretest to 75 in the posttest. The N-gain in this group was 0.50, which is categorized as moderate. Meanwhile, the control group improved from 50 in the pretest to 63 in the posttest. The N-gain in the control group was 0.27 and is classified as low. According to Hake's criteria (in Jumiasih et al., 2022), these results indicate that the RADEC model provides a more effective literacy-based learning experience compared to conventional learning. The RADEC model helps students build understanding through collaboration and reflection, especially in the Discuss, Explain, and Create stages. This is in line with constructivist theory by Vygotsky (1962), which states that social interaction supports students in developing their understanding and deepens the learning process. The effectiveness of the RADEC model can be seen not only in the overall results but also in the comparison of the mean scores for each reading comprehension sub-indicator, as shown in the following figure.

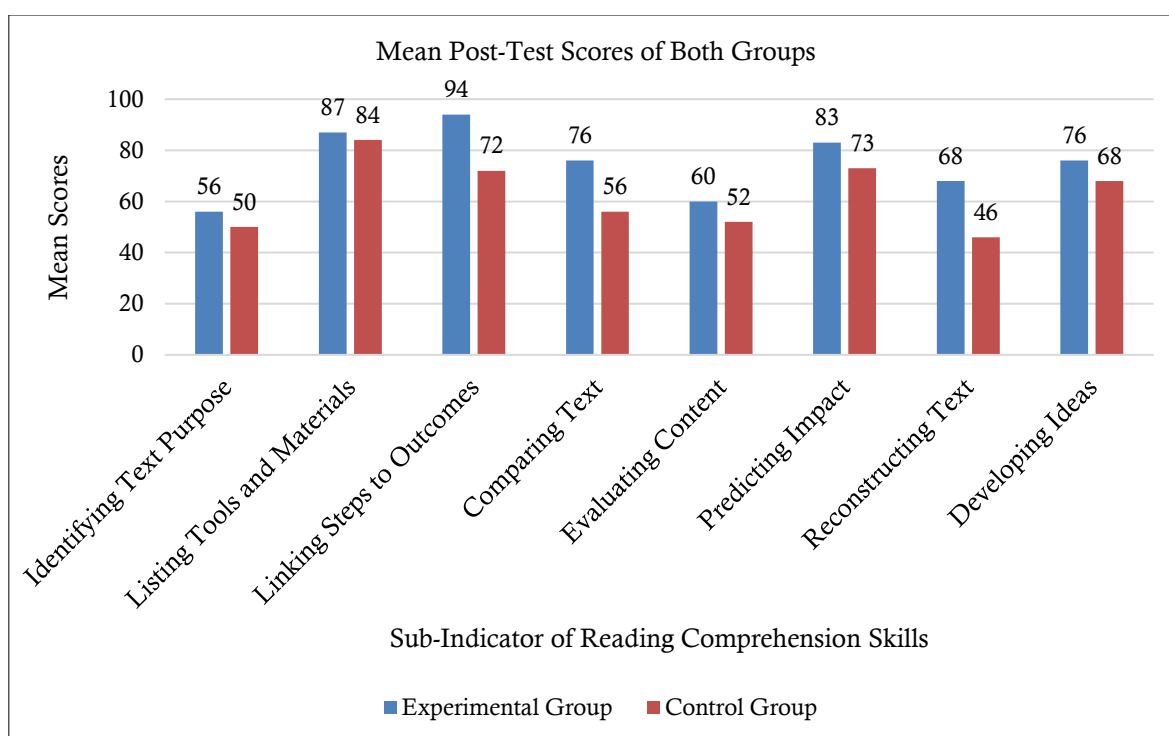


Figure 2. Difference in Posttest Mean Scores between the Experimental Group and the Control Group

Figure 2 illustrates that the advantages of the RADEC model are also reflected in the consistent and significant differences in the mean scores across all sub-indicators of reading comprehension. The greatest differences between the two groups were found in two sub-indicators: the ability to link the the steps in a procedural text with the intended outcome, and the ability to reconstruct other types of texts into a clear and systematic procedural format. These

two sub-indicators showed a score gap of 22 points. The first sub-indicator represents interpretive comprehension, while the second reflects creative comprehension.

The significant difference in the mean scores of these two sub-indicators indicates that learning through the RADEC model not only strengthens literal comprehension but also encourages students to build a deeper understanding. This finding aligns with Knapp & Watkins (2005), who argue that understanding procedural texts involves mastery of text structure, content coherence, and specific linguistic features. The stages in the RADEC model provide space for students to actively engage in exploring procedural texts progressively, leading toward the development of higher-order thinking skills, including creativity.

This result is further supported by Ghazali (2010), who states that reading comprehension involves integrating information, analyzing content, evaluating critically, and independently reconstructing texts. A similar view is shared by Abidin (2012), who asserts that the process of reading comprehension includes activities such as interpreting and analyzing. In this regard, the stages of the RADEC model facilitate students in gradually developing these cognitive abilities. Moreover, reading comprehension is an active interaction between the reader and the text (Somadayo, 2011). Therefore, the intensity of student engagement with reading materials plays an essential role in the development of their reading comprehension skills. As noted by Pratama et al. (2019), the more frequently students engage with reading materials, the better their comprehension becomes. Thus, the RADEC model not only fosters a deeper understanding of procedural texts but also cultivates reasoning and critical thinking skills through structured and meaningful learning stages.

These findings are consistent with previous studies showing that the RADEC model significantly enhances students' reading comprehension skills (Hasibuan et al., 2024; Ica et al., 2024). Although the improvement observed in this study falls within the moderate category, the results consistently suggest that the RADEC model effectively supports students in gaining a deep understanding of procedural texts. Active student involvement in the RADEC learning process is one of the key advantages of this model over conventional learning. Conventional learning models provide less freedom for students to explore their understanding, so improving their reading comprehension is not as optimal as in the experimental class. This also suggests that literacy-based learning, which involves active student participation, is more effective in improving reading comprehension skills.

Conclusion

Based on the findings and discussion in the previous sections, this study concludes that the RADEC learning model is more effective in improving reading comprehension skills than the conventional model. This is evidenced by the statistical test results, which show a significant difference in the level of improvement. Furthermore, the class taught using the RADEC model demonstrated higher score improvements than the conventional class, both overall and across all sub-indicators. These findings imply that the RADEC model plays a crucial role in support literacy development, particularly in reading skills. Through its structured learning stages, this model encourages students to engage with texts before and during classroom activities, trains them to express their understanding in written form, and develops other language skills such as listening and speaking. The RADEC model can be adopted as an innovative learning approach across various educational levels, provided that students already possess basic reading skills. Therefore, teachers need to be equipped with knowledge of this model through training programs facilitated by schools or through independent professional development.

Challenges in implementing the RADEC model lie in the teacher's readiness to provide relevant learning materials and prepare pre-learning questions. In addition, teachers must maintain student enthusiasm and engagement throughout the learning process, especially for students who are not yet accustomed to independent learning tasks. The limitation of this study is its focus on only one type of language skill and one genre of text. Thus, further research is needed to explore the application of the RADEC learning model to other text genres, different language skills, or 21st-century competencies.

References

- Abidin, Y. (2012). *Pembelajaran Membaca Berbasis Pendidikan Karakter*. Bandung: Refika Aditama.
- Ceyhan, S., & Yildiz, M. (2021). The Effect of Interactive Reading Aloud on Student Reading Comprehension, Reading Motivation and Reading Fluency. *International Electronic Journal of Elementary Education*, 13(4), 421–431.
- Creswell, J. W. (2012). *Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Yogyakarta: Pustaka Pelajar.
- Fitriyah, C. Z., & Wardani, R. P. (2022). Paradigma Kurikulum Merdeka Bagi Guru Sekolah Dasar. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, 12(3), 236-243. DOI: <https://doi.org/10.24246/j.js.2022.v12.i3.p236-243>
- Ghazali, A. S. (2010). *Pembelajaran Keterampilan Berbahasa Dengan Pendekatan Komunikatif-Interaktif*. Bandung: Refika Aditama.
- Hapudin, M. S. (2021). *Teori Belajar dan Pembelajaran: Menciptakan Pembelajaran yang Kreatif dan Efektif*. Jakarta: Kencana.
- Hasibuan, A., Pebriana, P. H., & Fauziddin, M. (2024). Penerapan Model Pembelajaran RADEC untuk Meningkatkan Keterampilan Membaca Pemahaman pada Siswa Sekolah Dasar. *Journal of Education Research*, 5(3), 2458–2466. DOI: <https://doi.org/10.37985/jer.v5i3.741>
- Herlambang, Y. T. (2018). *Pedagogik: Telaah Kritis Ilmu Pendidikan Dalam Multiperspektif*. Jakarta: Bumi Aksara.
- Ica, H., Tursinawati, T., & Kurniawati, R. (2024). Pengaruh Model Read-Answer-Discuss Explain Create (RADEC) terhadap Keterampilan Membaca Pemahaman Peserta Didik Kelas IV SD Negeri 1 Lambheu Aceh Besar. *Jurnal Tunas Bangsa*, 11(2), 124-139. DOI: <https://doi.org/10.46244/tunasbangsa.v11i2.2843>
- Jumiasih, J., Sukartiningsih, W., & Hendratno, H. (2022). Efektifitas Pengembangan Wondershare Quis Creator Dalam Meningkatkan Keterampilan Membaca Pemahaman Kritis Siswa SD. *Jurnal Ilmiah Mandala Education*, 8(2), 1758–1765. DOI: <https://doi.org/10.36312/jime.v8i2.3305>
- Kementerian Pendidikan dan Kebudayaan. (2019). *Panduan Gerakan Literasi Sekolah di Sekolah Dasar*. Direktorat Pembinaan Sekolah Dasar, Direktorat Jenderal Pendidikan Dasar dan Menengah, Kementerian Pendidikan dan Kebudayaan.
- Knapp, P., & Watkins, M. (2005). *Genre, Text, Grammar: Technologies for Teaching and Assessing Writing*. Australia: University of New South Wales Press.

- Maya, Y., & Saragih, E. (2021). The Utilization of Animation in the Theory of Procedure Text Writing for VI-Grade SD Methodist-2 Medan Students. *Advances in Language and Literary Studies*, 12(2), 70–75. DOI: <https://doi.org/10.7575/aiac.all.v.12n.2.p.70>
- Noor, J. (2013). *Metodologi Penelitian: Skripsi, Tesis, Disertasi, dan Karya Ilmiah*. Jakarta: Kencana.
- Nurgiyantoro, B., Gunawan, & Marzuki. (2015). *Statistik Terapan Untuk Penelitian Ilmu Sosial (Teori & Praktif dengan IBM SPSS Statistic 21)*. Yogyakarta: Gajah Mada University Press.
- Pohan, A. A., Abidin, Y., & Sastromiharjo, A. (2020). Model Pembelajaran RADEC Dalam Pembelajaran Membaca Pemahaman Siswa. *Seminar Internasional Riksa Bahasa XIV*, 250–258.
- Pratama, Y. A., Sopandi, W., & Hidayah, Y. (2019). RADEC Learning Model (Read-Answer-Discuss-Explain And Create): The Importance of Building Critical Thinking Skills In Indonesian Context. *International Journal for Educational and Vocational Studies*, 1(2), 109–115. DOI: <https://doi.org/10.29103/ijevs.v1i2.1379>
- Quinn, M. F., & Traga Philippakos, Z. A. (2023). Building a Bridge: Writing and Reading Connections in Early Childhood. *The Reading Teacher*, 77(2), 260–267. DOI: <https://doi.org/10.1002/trtr.2235>
- Ramadhani, R., & Bina, N. S. (2021). *Statistika Penelitian Pendidikan Analisis Perhitungan Matematis dan Aplikasi SPSS*. Jakarta: Kencana.
- Somadayo, S. (2011). *Strategi dan Teknik Pembelajaran Membaca*. Yogyakarta: Graha Ilmu.
- Sopandi, W., Sujana, A., Sukardi, R. R., Sutinah, C., Yanuar, Y., Imran, Muh. E., Suhendra, I., Dwiyan, S. S., Sriwulan, W., Nugraha, T., Sumirat, F., Nurhayati, Y., Kusumastuti, F. A., Lestari, H., Yuniasih, N., Nugraheny, D. C., & Suratmi. (2021). *Model Pembelajaran RADEC Teori dan Implementasi di Sekolah*. Bandung: UPI Press.
- Thompson, S., Provasnik, S., Kastberg, D., Ferraro, D., Lemanski, N., Roey, S., & Jenkins, F. (2012). *Highlights From PIRLS 2011 Reading Achievement of U.S. Fourth-Grade Students in an International Context*. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
- Tilaar, H. A. R. (2015). *Pedagogik Teoretis untuk Indonesia*. Jakarta: Kompas.
- Vygotsky, L. S. (1962). *Thought and Language: Kap. 6 The Development of Scientific Concepts in Childhood, Übersetzt von Eugenia Hanfmann und Gertrude Vakar*. New York and London: MIT Press - John Wiley & Sons, Inc, S.
- Wahyuni, S., & Ibrahim, Abd. S. (2012). *Asesmen Pembelajaran Bahasa*. Bandung: Refika Aditama.
- Wijayanti, W., Zulaeha, I., & Rustono, R. (2015). Pengembangan Bahan Ajar Interaktif Kompetensi Memproduksi Teks Prosedur Kompleks yang Bermuatan Kesantunan Bagi Peserta Didik Kelas X SMA/MA. *Seloka: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 4(2), 94–101. DOI: <https://doi.org/10.15294/seloka.v4i2.9866>