

Implementation of the RADEC (Read-Answer-Discuss-Explain-Create) Learning Model to improve Elementary School Student's English writing Skill

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Abstract. One of the efforts to respond to current educational challenges was by developing writing skills, including writing in a foreign language like English. This presented a significant challenge for students, particularly in Indonesia. Of the four language skills, writing had its own challenges and was still considered the most difficult skill to master by most Indonesian students. This research aimed to determine how the RADEC Model could improve students' skills in writing English texts. The activities involved several stages: observation, teaching, and a post-test. This research uses a quantitative method of experimental type using a pre-experimental design using the One-Group Pretest Post-test Design model with a sample size of 27 students. Data analysis techniques using normality test, descriptive analysis, Wilcoxon test, and making conclusions. Initial observations showed students' weak writing skills, which became a key consideration in determining the learning model. The RADEC model was selected based on its alignment with students' interests and abilities. Post-test results found that more than half of the students showed improvement in writing skills with the RADEC model, with frequent errors still observed in vocabulary usage.

Keywords: RADEC, Learning model, Writing skill, elementary

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INTRODUCTION

Education in Indonesia has a very long journey. Changing curricula are made and adjusted to the needs of the development of the era and future predictions. In the context of basic education, language is a mandatory learning not only for the mother tongue but also for foreign languages. Elementary school students have excellent abilities to learn foreign languages. Through foreign language teaching, students will get used to appreciating other cultures and tend to be better able to solve complex problems (Rose & Nicholl, 2014).

Communication skills are seen through language. Language functions as a tool to convey ideas and concepts (Hamalik, 2011). One of the most widely used foreign languages in the world as a language of instruction is English. Law No. 20 of 2003 concerning the National Education System, Chapter III, Article 4, Paragraph 5, states that education is organized by developing a culture of reading, writing, and arithmetic for all citizens. If we compare education in Indonesia with other countries in Asia, Indonesia currently still has a fairly large gap. This can be seen from the reading and writing skills of Indonesian children, which are still far above average. Especially in reading and writing in English.

English has become an integral part of life in today's era of disruption, widely used across various technological devices, from simple tools to complex systems. It is considered a universal language, as it is the primary language spoken in many countries around the world. Moreover, English is one of the most important international languages to learn and

master. In some countries, particularly former British colonies, English is established as a mandatory second language alongside their native tongues (Maduwu, 2016; Aini, 2021).

English has long been an inseparable part of Indonesia's education system. Initially, it was taught only at higher education levels. However, over time, the demand for and popularity of English has grown significantly, prompting changes in the curriculum for English language instruction. To improve students' English proficiency, the government began introducing English lessons at lower levels of education, specifically at the elementary level (Faridatunnisa, 2020).

Although English is considered a foreign language in Indonesia, it holds a significant role in the daily lives of its people. This is particularly evident in the education system, where English is taught to students from elementary school to higher education levels.

In the context of learning English in elementary schools, teachers must possess adequate competencies and understand the nature of their students. This includes recognizing how students learn, how they acquire language, how they learn English as a foreign language, and the facilities that need to be prepared by the teacher (Musthafa, 2010). If a teacher fails to grasp the essence of their students—especially elementary school students with their emotional needs and developmental stages—it will inevitably affect the continuity of language learning (Kim et al., 2022).

Utilizing diverse teaching models and methods in English learning can undoubtedly spark students' interest and engagement. This presents both a challenge and an opportunity for English teachers in elementary schools. There is a growing need for creative thinking and continuous innovation from teachers to ensure active student participation in the learning process.

Moreover, in today's era of technology, teachers must adapt to technological advancements to facilitate and design learning experiences that are relevant and meaningful to students' daily lives (Aidinlou & Moradinejad, 2016). This adaptation not only makes learning more accessible but also bridges the gap between education and students' real-world experiences.

The penetration of proper English usage in Indonesia remains very low, with less than eight percent of the population proficient in the language. This is partly due to the significant number of teachers who either lack qualifications in English education or are not specialized in teaching English (Juliah et al., 2021).

English learning in schools has four aspects of language skills that must be mastered by students, namely listening, speaking, reading, and writing skills. Keraf (2001) stated that the

four language skills are related to each other with a very close relationship. Basically, these four skills are a unity that cannot be separated, so someone is said to be skilled in language if they are skilled in listening, speaking, reading, and writing. Therefore, these four skills must be mastered well and language is a tool for humans to relate to each other, learn from each other, share experiences, and improve intellectual abilities. Writing is very important for life because writing actively will be beneficial for a person.

Writing is an activity of conveying messages (communication), ideas, and ideas using written language as a tool or medium. In writing activities, students can develop ideas, concepts, and creativity that exist in themselves and can be expressed in writing. In addition, writing is a form of writing skill that generates ideas and then develops these ideas into complete sentences, thus perfecting the results of their writing. Morsey (in Tarigan, 2013) stated that writing skills are very much needed and beneficial for students because writing skills will not come by themselves, but through a process of regular training and practice will make writing skills more effective, so writing skills are a very important skill in life.

The habit of students to rewrite about what has been read is quite easy because there are no challenges to be faced. This habit is continuously cultivated so that when students are asked to write about their feelings and thoughts about a writing, they feel difficult and are not confident in expressing it. In this case, students are faced with a mental process that forces them to express their ideas (Osmani, 2022).

A person utilizes writing skills not only in education, but also very important in society. In addition, writing skills are also one of the language skills that are the goal of every language teaching in schools. Learning to write in schools is a means to develop writing skills because the success of students in following lessons in school is largely determined by writing skills. Therefore, writing skills are very important for all subjects. Writing skills are not only needed when someone is still in school, even after graduating someone needs to have writing skills. From this explanation, it is hoped that students can have the motivation to continue writing and sharing writing in the form of descriptions well.

This is because international communication requires English as an international language, so that in education in Indonesia, English language skills are one of the skills that must be mastered by students from the beginning. In this case, English language learning is directed at four skills in English, including: listening, speaking, reading, and writing.

Currently, in elementary schools, English lessons are still taught in an inclusive manner in one theme unit and then the four skills are taught directly, so that to find out the mastery of these skills can be seen as the results of student learning in English lessons. Brown (1994) said that learning is often considered a translation of the term "instructional" is the process of

interaction between students and educators and learning resources in a learning environment. Learning is explained by Gagne and Briggs in Brown, as an effort by people whose goal is to help people learn. Therefore, there are five assumptions that support learning, namely (1) learning must be planned to facilitate student learning, (2) both short-term and long-term phases are included in the learning design, (3) learning planning should not be haphazard and should not merely provide a nurturing environment, (4) learning efforts must be designed with a system plan, and (5) learning must be developed based on knowledge about how people learn.

In another section, Uno (2007 p.54) states that learning can be interpreted as a process of interaction between learners and teachers/instructors and/or learning resources in a learning environment to achieve certain learning goals. Here it can be seen that learning is a process of interaction between learners and their environment so that there is a change in behavior towards the better. In the learning process, the main principle is the process of involving all or most of the students' potential and its meaning for themselves and their lives now and in the future. Furthermore, Gagne and Briggs in Brown (1994 p. 9-10) explain that there are several characteristics of learning, namely (1) attracting attention so that learners are ready to receive lessons, (2) informing the objectives of the lesson, (3) stimulating the emergence of memories of previous teachings, (4) presentation of teaching materials and learning aids (5) providing learning guidance, (6) generating performance in learning, (7) providing feedback, (8) assessing performance, and (9) strengthening retention and transfer of learning. English in Indonesia is generally taught as a foreign language. The term 'foreign language' in the field of language teaching is different from 'second language'. A foreign language is a language that is not used as a means of communication in a particular country where the language is taught. While a second language is a language that is not the main language but is one of the languages used generally in a country. While foreign languages are usually taught as one of the subjects in schools with the aim of basic communication and mastering 4 language skills (listening, reading, writing, speaking) in the language within certain limits.

Writing learning with the status of English as a Foreign Language (EFL) is indeed difficult and complex and the process is also challenging (Seifoori, Mozaheb, & Beigi, 2012). In addition, many children need a long time to hone their writing skills. In fact, writing learning often prioritizes writing corrections, grammar, spelling errors, and punctuation rather than the content of the writing (Scott & Ytreberg, 2003). In fact, students do not only need the right writing techniques. But also the benefits of writing itself, and what are the functions of the products or results of the writing they create. Therefore, a writing learning approach is needed that is in accordance with the needs and character of elementary school students.

State Elementary School 125 Taruna Karya is a State Elementary School under the Bandung City Education Office. This Elementary School is located at Jalan Cilengkrang 2 No. 80, Palasari Village, Cibiru District. As an Elementary School, it has included English lessons at all levels, or classes since the implementation of the Merdeka Curriculum. Students from grades I to VI receive English lessons as local content (mulok).

Based on the results of the analysis of students' narrative text writing skills carried out at State Elementary School `125 Taruna Karya after the trial, the results were still low. This is evidenced by the fact that many students' scores do not reach the KKM (Minimum Completion Criteria). In addition, students still find it difficult to understand the structure of narrative texts because of their limited mastery of English vocabulary. Furthermore, teachers only convey this material in the form of theory and the learning process still uses conventional methods. Of course, this only shows that the learning process is still one-way and has not been directed at student-centered so that learning prioritizes products rather than processes and is still dominated by learning using the lecture method. One of the efforts made to overcome these problems is to use the RADEC learning model. According to Sopandi, Pratama, & Handayani (2019) the RADEC learning model (Read, Answer, Discuss, Explain, and Create) is a learning model that can encourage students to develop 21st century skills and master the learning concepts they learn. Of course, this learning model is very much in line with developments in the current era.

The RADEC model is a learning model that is oriented towards mastering 21st century competencies and skills. The RADEC model has several advantages, including developing communication skills, collaborating, and helping students gain conceptual understanding. Conceptual understanding of the science or phenomenon to be explained is one of the determining factors in writing explanatory texts. With the advantages of the RADEC model, it is hoped that this model can develop students' abilities in writing texts (Setiawan et al., 2019).

Based on the researcher's assumption by looking at students' low writing skills, there are problems that must be studied, for that the author will solve this problem by conducting a research activity entitled "Implementation of the RADEC (Read-Answer-Discuss-Explain-Create) Learning Model to improve Elementary School Student's English writing Skill".

METHODOLOGY

This research is a quantitative research. The research location was conducted at SD Negeri 125 Taruna Karya, located at Jalan Cilengkrang II No. 80, Palasari Village, Cibiru District. The research time was carried out in the odd semester of the 2024/2025 school year. The population in this study were all fifth grade students at SD Negeri 125 Taruna Karya. The

research sample used in this study was class V with a sampling technique, namely saturated sampling. The research method used was quasi-experimental. The research design used was One-Group Pretest-Posttest Design. This research design in one class before being given treatment, students were given a pretest (initial test) which aims to determine the initial state of each student in the learning process. Then students were given treatment using the RADEC learning model and after that they were given a posttest (final test) which was to determine whether there was a difference in the achievement of students' writing learning outcomes before and after being given treatment.

The data collection technique is in 2 ways, the first is the test technique in the form of a descriptive question instrument of 12 questions to assess students' achievement in writing narrative text learning outcomes. Second, with documentation techniques. This research was conducted during 2 meetings. In this study, the reliability test data analysis technique was used, the normality test using the Shapiro-Wilk type was used to determine whether the data was normally distributed or not, descriptive analysis, and non-parametric tests with the Wilcoxon test were used when the data was not normally distributed. The data obtained from the research results were then analyzed statistically by testing the students' pretest and posttest scores. After the pretest and posttest scores were obtained, the average score between the pretest and posttest was tested using the N-Gain test to determine the level of effectiveness. Furthermore, the tests carried out were the Shapiro Wilk normality test, Levene's homogeneity test and hypothesis testing in the form of the Paired Sample t Test using the IBM SPSS Statistics 22 application program. In this hypothesis test, the significance level used was 0.05. The decision on the hypothesis test was determined by the criteria: if Sig. (2-tailed) <0.05 then H₀ is rejected and H_a is accepted.

RESULTS AND DISCUSSION

Data on students' achievement in learning outcomes in writing explanatory texts obtained from pretest and posttest scores are presented in table 1 below.

Table 1. Pre Test and Post Test Comparison

No	Frequency Distribution	Result	
		Pretest	Posttest
1	Highest Score	80	100
2	Lowest Score	25	60
3	Mean	47.39	79.78
4	Standar Devisiasi	18.082	9.591

Based on the calculation data, the N-Gain results can be seen in table 2 below.

Table 2. Results of N-Gain calculations

N-Gain Score	N-Gain Score Pre-Post
0,627	62,76

From the calculation results above, the average NGain score value if categorized into the average Gain score criteria is moderate, this is because $0.3 < 0.7$. The average N-Gain score pretest posttest for its effectiveness level is categorized as quite effective, this is because based on the effectiveness standard it is quite effective, namely with an average value range of 60-79.99 and the average N-Gain score pretest posttest is 62.76.

The results of the normality test show that the data on the achievement of students' learning outcomes in writing explanatory texts in the pretest has a sig. > 0.05 , which is 0.236. While for the posttest it has a sig. > 0.05 , which is 0.367. This value is greater than $\alpha = 0.05$ (Sign. > 0.05), so that the data on the variable achievement of students' learning outcomes in writing explanatory texts is normally distributed. The results of the homogeneity test of the achievement of students' learning outcomes in writing explanatory texts in the pretest and posttest showed a Sig. value of 0.127, so it can be said that the Sig value > 0.05 . Thus, the data on the achievement of students' learning outcomes in writing explanatory texts is homogeneous. The results of the analysis and calculation of the hypothesis test data carried out showed an Asymp. Sig. (2-tailed) value of 0.000. So it can be said that Asymp. Sig. (2-tailed) < 0.05 , then according to the research hypothesis H_0 is rejected and H_a is accepted. Based on the hypothesis statement, it can be concluded that "The use of the RADEC learning model is effective for students' narrative text writing skills at SD Negeri 125 Taruna Karya".

Based on the calculation results above, learning using the RADEC learning model has better achievement of learning outcomes in writing explanatory texts when compared to learning using the usual learning model. From the average pretest and posttest values, the RADEC learning model is effective in achieving students' learning outcomes in writing explanatory texts, in accordance with research conducted by Setiawan, et al. (2019) which states that the RADEC learning model is effective in improving the ability to write explanatory texts and mastery of elementary school students' concepts.

The difference shown by the analysis results by looking at the average pretest and posttest scores, there is a difference between the results of both before being given treatment using

the RADEC learning model and after being given treatment with the RADEC learning model. These results are also reinforced by the research results of Setiawan, et al. (2019) and Pratama, et al. (2020) which state that learning using the RADEC learning model is effective and has an effect on students' ability to write explanatory texts. In the process of learning activities, the teacher acts as an intermediary for students in overcoming difficulties and helping them solve problems during the learning process. So that it can provide new ideas and also enrich students' knowledge. In line with this research, research conducted by Setiawan, et al. (2019) states that learning to write explanatory texts used the RADEC learning model has implications for the learning process, namely encouraging students to be more active in the learning process, developing students' ability to explain, training students to work together, and improving students' reading habits. In addition, Sopandi, et al. (2019) stated that learning carried out using the RADEC learning model can inspire students to produce creative ideas or thoughts as an application of the knowledge they have mastered. Likewise, students' awareness and willingness to be more active in learning are needed in order to obtain various good things for themselves and others.

CONCLUSION

Based on the results of data analysis from hypothesis testing, it can be concluded that the RADEC learning model is effective in improving students' narrative text writing skills so that it can be said that the use of this RADEC learning model is effective in improving students' English narrative text writing skills at SD Negeri 125 Taruna Karya. As one of the references for further educational research, and this RADEC learning model can be used as an alternative guide for teachers in improving the achievement of learning outcomes in writing other types of texts by students.

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