THE IMPLEMENTATION OF RADEC (READ, ANSWER, DISCUSSION, EXPLAIN, CREATING) STRATEGY IN TEACHING ENGLISH VOCABULARY MASTERY AT SD NEGERI PATOMPO II MAKASSAR

Eva Yulia Ningsih¹, Geminastiti Sakkir² and Nur Aeni^{3*}

^{1, 2, 3} Universitas Negeri Makassar

E-mail: ¹<u>evayulianingsi01@gmail.com</u> ²<u>geminastitisakkir@unm.ac.id</u>, ³<u>nur_aeni@unm.ac.id</u>*

*corresponding author

Abstract

The objective of this research was to find the effect of the RADEC strategy in teaching English vocabulary mastery in class VI SD Negeri Patompo II Makassar. This study was a preexperimental design with one group given the RADEC strategy. The population of this research were all students of SD Negeri Patompo II Makassar. The population of this research used purposive sampling technique. The sample consists of 15 students. Data were collected using tests (pretest and posttest). The data collection technique used SPSS version 28. The results of descriptive statistical analysis showed that the mean pretest result was 56.13 in the "poor" classification. The mean posttest result was 85.86 in the "good" classification. Therefore, it can be concluded that the RADEC strategy effect in teaching English vocabulary mastery at SD Negeri Patompo II Makassar.

Keywords— RADEC Strategy, Vocabulary Mastery.

INTRODUCTION

Strategy is a design or plan to carry out something to achieve the goals expected goal and the strategy sometimes consist of some steps. According to Helmiati (2012) learning strategy are forms of learning shown from the beginning to the end presented typically by the teacher. The learning strategy is the scope of the application of an approach, method, and learning techniques. The learning strategy is a strategy that can applied as a basis for planning English learning in the class (Salamah Zainiyati, 2010). The learning strategy means a conceptual framework and strategy explains a systematic step in managing students' experiences to realize the learning goals and function as an instruction for learning designers and teachers in implementing the activities of the teaching and process of learning (Suyanto & Djihad, 2012). From the definitions above, it can be resumed that the learning strategy is a plan that can applied by the teacher.

One of the Strategy that can be introduced by English teachers is the RADEC-based learning strategy. In RADEC strategy, there are some steps are used as a strategy. According Sopandi (2014) states that RADEC strategy is a strategy that can applied teachers to improving the good quality of students. The RADEC strategy is a strategy that has been adjusted to the Indonesian context. This strategy has learning steps that can encourage students to learn actively and productively. The RADEC learning strategy has several advantages, one of which is that it can encourage students to acquire 21st century skills.

There are several previous findings that studies about RADEC strategy. The first one is research written by Sopandi and Pratama (2019) entitled Dissemination and Implementation Workshop of RADEC Learning Models. The results of the research on socialization and workshops on the RADEC learning strategy indicate that the participants more easily remember and understand the RADEC strategy. They think that the strategy can build character (obligation, integrity, curiosity, discipline, hard work, independent, democratic, love to read, diligent, confident, hard working, thorough and brave) and 21st century skills. In addition, this research also indicates that the majority of participators are interested in implementing the RADEC strategy. The researcher took a sample or the number of participants and the work area was limited and carried out in rural, urban and urban areas. In English vocabulary is one of the basic that help someone to communicating, therefore Vocabulary is important to learn.

From several previous finding, the researchers do not explain the RADEC strategy in teaching English especially vocabulary materials for elementary school students. Therefore, this research focus on the implementation of RADEC strategy in the elementary school at SD Negeri Patompo II Makassar. Therefore, the researcher is interested in researching RADEC strategy.

LITERATURE REVIEW

1. The concept of Teaching Strategy

Strategy in teaching is one part of the learning system. The parts of the learning system, of course, include objectives, teachers, students, teaching materials, and learning strategies. Strategy is an accurate planning process of activities to be carried out to achieve certain goals. In this case, of course, each strategy used for each level of education must be different. This is because students have different levels of knowledge and skills.

Therefore, the concept of teaching strategies at the elementary level will certainly be different from the concept of learning strategies at the junior and senior high school levels. Strategy of learning is important in the world of education because strategy can improve the good quality of students and students more understand to learn the English materials.

2. The Concept of RADEC Learning Strategy

According to Sopandi (2019) states that RADEC strategy is a strategy that can advise students to improving students' skills and control the learning concepts learned.

The RADEC strategy is developed based on the following points. First, improve the good potential, become a good human, knowledge able, capable, creative, independent. Second, this strategy was extended on the basis of constructivism theory. According to Vygotsky (1962) suggests about cognitive skills in children can develop through communication with the social environment. In the process of learning English, first students need to learn independently, then if students have difficulty students can ask the teacher for help about a concept of the subject matter.

3. The Concept of Vocabulary

according to krashen (2014) defines vocabulary as the words that we teach in a foreign language. That the choice in the choice of vocabulary and the method used in teaching vocabulary is an important factor. It takes a learning process in a context to get the meaning of words as suggested by French (1983). Vocabulary is an important component in two languages; One of the main goals of language learning is knowing the meaning of words. Therefore, students more understand the language. It is necessary to communicate successfully in a second language.

Hornby (1995) explains that vocabulary is the number of words (by their meaning and with the rules for combining they) make up the language. Definition of mastery is learning or understanding something and students don't feel difficult to use because students understand well.

METHOD

1. Research design

The research design that was used by researcher in this study is quantitative preexperimental with one group class. According to Hermawan, (2019: 16) quantitative research is a research method obtained in the form of numbers that are analyzed using statistics and aims to accept or reject a theory. In this study, quantitative methods are used to test the hypothesis through the sample to be obtained, namely the influence of the influencing variable (independent), namely the RADEC learning strategy on the dependent variable, namely students' English learning ability.

2. Source of data

The data source took from two types of data, which are secondary and primary data source. The primary data is the English Teacher in SD Negeri Patompo II. Then in supporting the research of data, The researcher use secondary data from books a research journals, previous research that have a relationship with this research.

3. Research Subject

The research subject from this study are things, cases or people where the data for research variable was explored by the researcher. The subjects of this research are the students' class VI at SD Negeri Patompo II.

4. Technique of data collection

The technique used to collecting the data in this research is a test technique. A test is a series of tasks that are intended and carried out by the students to analyze work that can be assessed. The steps before taking the data are Pre-Test, treatment, and Post-Test. The stages before taking the data are pretest, treatment, and posttest.

5. Technique of data analysis

The data analysis process in this research using inferential statistics which was analyzed with using the SPSS application. Based on the type of research used in this study, namely quantitative research, the researcher proces the data that has been collected using statistical procedures. The results of the data that have been obtained was tested using a t-test. In the t-test, it indicated that how far the effect of the independent variable is in explaining the dependent variable. In this research was calculated through the application of SPSS version 28.

FINDINGS AND DISCUSSION

FINDINGS

The results of this study are the presentation of students learning before using the RADEC strategy (pretest) and after using the RADEC strategy (posttest). It is described with descriptive

statistical test and inferential statistical test using the SPSS version 28 which aims to answer the problem statement in chapter 1.

The Effect of RADEC Strategy in Teaching English Vocabulary Mastery at SD Negeri Patompo II

Classification	Range	Pro	etest	Post-test		
	runge	Frequency	Percentage	Frequency	Percentage	
Very Good	93-100	0	0	3	20	
Good	84-92	0	0	7	46	
Average	75-83	0	0	5	34	
Poor	<75	15	100	0	0	
Total	I	15	100	15	100	
	Very Good Good Average Poor	Very Good 93-100 Good 84-92 Average 75-83 Poor <75	Classification Range Frequency Very Good 93-100 0 Good 84-92 0 Average 75-83 0 Poor <75	Very Good 93-100 Percentage Good 84-92 0 0 Average 75-83 0 0 Poor <75	Classification Range Frequency Percentage Frequency Very Good 93-100 0 0 3 Good 84-92 00 00 7 Average 75-83 0 0 5 Poor <75	

a.	The rate frequency and	l percentage of students'	pretest and posttest scores

The results of students learning (experimental groups) are described with descriptive statistical test through frequency distribution data that represented the pretest score. The experimental groups are the class that are given the RADEC learning strategy. The table shows that there are no students who get "Very good" classification in the pretest, 15 students who get "Poor" classification. Therefore, based on descriptive statistical analysis from the frequency distribution table and pretest scores that the results of students learning before using the RADEC strategy are "poor" classification because the percentage showed 100% or 15 students who get "Good" classification and 3 students who get "very good" classification in the posttest. It means that the percentage value of the posttest score is higher than pretest.

b. The mean score and standard deviation

This research employed a pre-experimental method with only one class serving as the sample (the same sample), therefore the data calculation used the paired sample test.

			Mean	N	Std. Deviation	Std. Error Mean
ľ		Pre-test	56.13	15	8.29	2.142
	Pair 1	Post-test	85.86	15	4.88	1.260

The table shows that the mean pretest score of students is 56.13 which is classified as "Poor," Therefore, it can be concluded that the pretest score of students before using the RADEC strategy is low. While the mean posttest score of students is 85.86 which is classified as "Good," and indicate that the posttest mean score is higher than the pretest mean score. Because the pretest standard deviation is 8.29 and the posttest standard deviation is 4.88, it can be stated that the pretest standard deviation is slightly lower than the posttest standard deviation, implying that the posttest score is higher than the pretest score. The results of the descriptive analysis (posttest) of students after participating in learning English using the RADEC strategy described in the previous section showed that (1) the mean posttest score obtained by students 85,86. (2) there are 15 students get "poor" classification.

		Paired Differences							
		Mcan	Std. Deviati on	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2- tailed)
					Lower	Upper	1		
Pair 1	Pre-test Post-test	-29.733	9.114	2.353	-34.780	-24.686	-12.63	14	<.001

c. The inferential analysis between pre-test and post-test

The table 4.3 above is analyzed by using SPSS version 28 analysis within Paired Samples Test. If the level of significance (a = 0.05) is greater than value (sig. 2-tailed) means there is no significant difference. Whereas, if the level of significance "a" is lower than p value (sig. 2-tailed) means there is significant difference. Based on the table 4.3, the significant value of this research is <001, it is lower than the significant level 0.05. It means that the implementation of RADEC strategy in teaching English affect students' vocabulary mastery. The results are same with the findings of Lestari (2021) entitled The Impact of Online Mentoring in Implementing RADEC Learning to The Elementary School Teachers' competence in training Students' Critical Thingking Skills.

Lestari (2021) stated that the data were analyzed inferential using SPSS version 22 to know a paired sample t-test and from the anylisis the researcher see the impact of the treatment on teachers' competence in training thinking. Therefore, for both the skills aspects and the knowledge, the significant value was 0,00<0.05. Therefore, from the results shows that there is a significant difference between the skills of teacher and the knowledge in training students' critical thinking skills before an after mentoring. This research indicated that the implementing RADEC in online mentoring improved teachers' competence.

DISCUSSION

The Effect of RADEC Strategy in Teaching English Vocabulary Mastery at SD Negeri Patompo II

The results of students pretest before using the RADEC strategy described in the previous section show that (1) The mean pretest score obtained by students is 56,13. Mean score much lower than the ideal value of 100, and (2) no students get "Very good" classification in pretest. Therefore, it can be resumed that the results of students learning before using the RADEC is in the "Poor" classification. These results are same with the results of Setiawan (2020) which shows that there is significant difference in students' ability between students who receive learning using the critical multiliteracy and students who receive learning using the RADEC strategy.

Setiawan (2020) emphasized in his research that the implementation of the RADEC strategy has more influence in students' ability, not only on certain materials. The results of the study show that the mean pretest 1 is 36.6 and the mean posttest is 78. From the results it can be deduced that there are differences significant in the ability of writing explanatory text of students using RADEC strategy. Setiawan (2020) focuses on the ability of writing Explanatory text while the results of this study focus on the ability of vocabulary mastery. The implementation of the RADEC strategy has the advantage that it can be used as further research.

Based on the results of this research that has been explained, it can be concluded that the RADEC strategy can develop the potential of the students to be used in the 21st century because ttable < tcount, thefore the hypothesis is accepted, because there is an effect of the implementation of RADEC strategy. Acurate learning strategy will make the achievement of learning objectives in accordance with what has been designed. Accurate learning strategy is applied to the K13 integrated thematic learning proses in addition to the RADEC model, namely learning with PBL and PJBL models (Friani, Sulaiman, & Mislinawati, 2017).

This study shows that the mean pretest score of students is 56.13 while, the mean posttest score of students is 85.86 and indicate that the posttest mean score is higher than the pretest mean score. Because the pretest standard deviation is 8.29 and the posttest standard deviation is 4.88, it can be stated that the pretest standard deviation is slightly lower than the posttest standard deviation, implying that the posttest score is higher than the pretest score. The results are same with the results of Soepandi. According to Soepandi in (Pratama, Soepandi, & Hidayah, 2019) also suggests that this strategy/model is a strategy in learning to make individuals have high skills, the activeness of study to learn independently, foster skills in communicating, collaborate, also supports students gain understanding theory.

The results of this study show that the mean pretest 40,44 and the mean posttest 70,08. It means that there is significantly between the mean pretest and the mean posttest. According to Fitria (2018) states that in Elementary Schools students must be prepared to learn independently in order to grow their potential, teachers are required to be able to make students students learn independently and share their positive behavior when the learning process is in progress. The strategy used for learning has advantages, including the model used by researchers in the learning process, namely the RADEC strategy. According to Sopandi (Sopandi & Handayani, 2019) explains that the RADEC strategy is able to make students diligent in reading, improve understanding of the material and motivate them to pocket the competencies demanded in this era.

The RADEC strategy has advantages, including (1) providing opportunities for teachers to design models/strategy used therefore, the learning process becomes interesting, (2) improving critical thinking performance in students, (3) improving students' analytical and reading skills, (4) improving cooperation in groups. According to Handayani and Soepandi (2019) entitled RADEC: An Alternative Learning of Higher Order Thinking Skills (HOTs) Students of Elementary School on Water Cycle states that one of the strengths of the RADEC strategy is that learning concentrates on problem-solving skills, and teaching. Therefore, it purposes that RADEC strategy is a learning strategy that can improve students' Higher Order Thinking Skills (HOTs).

Based on the table, the significant value of this research is <001, it is lower than the significant level 0.05. It means that the implementation of RADEC strategy in teaching English can affect students' vocabulary mastery. The results are same with the findings of Lestari (2021). Lestari (2021) emphasized the increasing influence of the RADEC strategy in students learning, However, Lestari (2021) focuses on The Impact of Online Mentoring in Implementing by using RADEC, while this study focuses on implementing the RADEC strategy in learning English. Therefore, the results SPSS application, for both the skills aspects and the knowledge, the probability sig was 0,00<0.05. It means that there is a significant.

In addition, the research findings are further strengthened by the view of Soepandi (2014) which reveals that this strategy is a strategy that has been adapted to the indonesian context and this strategy has several advantages, one of which is that it can encourage students to acquire 21^{st} century skills and this strategy can encourage students to learn actively and productively, therefore that it will improve students learning skills. From the results of the inferential statistical calculation of the T-test, the ttable value 1,771 and tcount 12,635, d=14 at a significant level of 0,05. The calculation criteria: H0 is accepted if tcount \geq ttable. Based on the results of the hypothesis testing, it can be stated that H0 can be accepted or learning using the RADEC strategy has effect in improving the teaching English vocabulary mastery at SD Negeri Patompo II.

CONCLUSION

In this research, the researcher uses the RADEC strategy in teaching English. RADEC strategy is a strategy that has been adapted to the Indonesian context. This strategy has learning steps that can encourage students to learn actively and productively. The RADEC learning strategy has several advantages, one of which is that it can support students to acquire 21st century skills. The goal of this research is to find the effect of RADEC strategy in teaching English vocabulary mastery. Based on the findings and discussion, it can be concluded that the results of students learning before using the RADEC strategy are in the "Poor" classification with the mean score *pretest* is 56,13 and the results of students learning after using RADEC strategy is in the "Good" classification with the mean score *posttest* is 85,86. Therefore, it can be concluded that the RADEC strategy affect in teaching English vocabulary mastery at SD Negeri Patompo II Makassar.

REFERENCES

- Friani, I. F., Sulaiman, & Mislinawati. (2017). Kendala Guru dalam Menerapkan Model Pembelajaran pada Pembelajaran Tematik berdasarkan Kurikulum 2013 di SD Negeri 2 Kota Banda Aceh. Jurnal Ilmiah Pendidikan Guru Sekolah Dasar FKIP Unsyiah, 2, 88– 97.
- French, A. (1983). Techniques in Teaching Vocabulary. England: Oxford University Press.
- Handayani, H. & Soepandi (2019). RADEC: An Alternative Learning of Higher Order Thingking Skills (HOTs) Students of Elementary School on Water Cycle. *Journal of Physics*. 2(1), 1-7.
- Hermawan, I. (2019). *Metodologi Penelitian Pendidikan (Kuantitatif, Kualitatif dan Mixed Method)*. Jawa Barat: Hidayatul Quran Kuningan.
- Hornby, A. S. (1995). Oxford Advanced Learner's Dictionary of Current English. England: Oxford University Press.
- Krashen, S. (2014). Vocabulary Acquisition through Read-Aloud and Discussion: A case Study. *The International Journal of Foreign Language Teaching*, 9(1), 2-6.
- Lestari, H. (2021). The Impact of Online Mentoring in Implementing RADEC Learning to The Elementary School Teachers' Competence in Training Students' Critical Thinking Skills: A Case Study during Covid-19 Pandemic. *Jurnal Pendidikan IPA Indonesia*.10(3), 346-356.
- Narmeiyanti, D. (2013). *Teachers' strategies in preparing students for English National Examination at Madrasah Aliyah Negeri (MAN) Negara Bali*. Surabaya: Universitas Islam Negeri Sunan Ampel Surabaya.
- Nurseptiani, K., & Maryani, N. (2019). Meningkatkan Minat Belajar Bahasa Indonesia Dengan Membandingkan Model Pembelajaran RADEC Dan Model Pembelajaran Konvensional. *Jurnal Pendidikan Guru*, 2 (2), 13-19.
- Setiawan, Dadan (2020). EFFECTIVENESS OF CRITICAL MULTILITERATION MODEL WITH RADEC MODEL ON THE ABILITY OF WRITING EXPLANATORY TEXT. *Jurnal Pendidikan Dasar*.12(1), 1-14.
- Sopandi, W. (2014). The Quality Improvement of Learning Processes and Achievements Through the Read-Answer-Discuss-Explain-And Create Learning Model Implementation. *Education journal*, 10 (2), 2-5.
- Sopandi, W., & Handayani, H. (2019). The Impact of Workshop on Implementation of Read-Answer-Discuss-Explain-And-Create (RADEC) Learning Model on Pedagogic Competency of Elementary School Teachers. *Education journal*, 17(8),7–11.

Sopandi, Wahyu, & Pratama Yoga Adi. (2019). Dissemination and Implementation Workshop of RADEC Learning Models for Primary and Secondary Education Teachers. *Education Jounal*. 2(1), 21-23.

Suyanto, & Djihad, A. (2012). Bagaimana Menjadi Calon Guru dan Guru.

Vygotsky, L. (1962). *Language and Thought*. Cambridge: MassThe MIT Press

Zandavakili, dkk. (2018). Eyd & Seputar Kebahasa-Indonesia. Jakarta: Kawan Pustaka.

Zainiyati, S.H. (2010). Model dan Strategi Pembelajaran Aktif: Teori dan Praktek dalam Pembelajaran Pendidikan Agama Islam.Surabaya: CV. Putra Media Nusantara.