Panicgogy International Journal

Publication details, including instructions for authors and subscription information:

Application of the RADEC learning model assisted with flipbook media to improve student's reading comprehension ability

Erma Sulastyana[a], Rif'at Shafwatul Anam[b*], Sunata[c]

[a] Universitas Terbuka, Indonesia, ermasulastyana@gmail.com

[b*]Universitas Terbuka, Indonesia, rifat.official@ecampus.ut.ac.id

[c] Universitas Pasundan, Indonesia, sunata@unpas.ac.id

To cite this article:
Sulastyana, E., Anam, R.S& Sunata. (2023). Application of the RADEC learning model assisted with flipbook media to improve student's reading comprehension ability. *Panicgogy International Journal, 1*(1), 50-56.
To link to this article: nakiscience.com/index.php/pij

Panicgogy International Journal, 1(1), 2023
https://nakiscience.com/index.php/pij

Orginal Article

Application of the RADEC learning model assisted with flipbook media to improve student's reading comprehension ability

Erma Sulastyana[a], Rif'at Shafwatul Anam[b*], Sunata[c]
[a] Universitas Terbuka, Indonesia, ermasulastyana@gmail.com
[b]*Universitas Terbuka, Indonesia, rifat.official@ecampus.ut.ac.id
[c] Universitas Pasundan, Indonesia, sunata@unpas.ac.id

*Corresponding Author: rifat.official@ecampus.ut.ac.id

Abstract
This study aimed to improve student's reading comprehension skills through the role of the RADEC (Read-Answer-Discuss-Explain-Create) learning model assisted by flipbook media. One of the reasons for the low reading ability of students was the learning process at school. Therefore, the teacher had to be able to determine the appropriate learning model. This research was a Classroom Action Research (PTK) model of Kurt Lewin. It was carried out in two cycles, starting with pre-cycle, cycle 1, and cycle 2. The research subjects were 22 (twenty-two) grade 3 students at SDN 036 Ujungberung Bandung City. Data collection was carried out using a written test in the form of multiple-choice questions of 10 questions. The results showed that there was an increase in the percentage of completeness of learning outcomes. The pre-cycle showed 45% of students were complete and 55% incomplete, cycle I had 68% complete and 32% incomplete, and cycle II had 100% completed and 0% incomplete. Based on the results of the study, it could be concluded that the RADEC learning model assisted by flipbook media could improve the reading comprehension skills of grade 3 students. The results of this study indicated that, in general, the RADEC learning model improved student learning activities. Students were more active when the learning process took place with various syntaxes. In addition, the RADEC learning model supported students' reading comprehension skills during the implementation process. With the syntax Read, students' reading comprehension skills were trained and their information or insights were broadened before receiving the subject matter. The RADEC learning model was suitable for students in Indonesia whose reading literacy level was low compared to other countries. With the habit of doing reading activities before the learning process, students' interest in reading could be increased.
Keywords: Reading, Reading Comprehension, Learning Model, RADEC

1. Introduction

Language is the human ability to communicate with other individuals. Language is an important element in human life. In language, there are ideas, messages, and information that exist in the human mind. Language is a symbolic structure that is arbitrary and has conventional meaning, a group of people communicates between members of their society (Mills, 2020; Rosdiana, 2014). In everyday life, language plays a role in social activities and scientific disciplines. With language, society is formed, and human life is fostered. Language has media in its delivery, both verbally and in writing (Mchombo, 2019). The process of conveying ideas in language is called language. In the 2013 curriculum, the competency that students must achieve in Indonesian language lessons is oral or written language competency. Language competency consists of four skills, namely listening, reading, speaking, and writing skills.

According to Rubin, reading comprehension is a complex intellectual process that includes two main abilities, namely mastering the meaning of words and the

ability to think about verbal concepts (Ikhtiyorovna, 2023; Pratama, 2015). According to Santoso & Sunata, 2022) reading comprehension ability is a person's ability to reconstruct the message contained in the text they read. This includes the process of reading critically, connecting the information presented with existing knowledge, and analyzing and synthesizing information to fully understand the message the author wants to convey. Thus, reading comprehension is not just understanding words, but also understanding the meaning contained in them and relating them to a wider context.

Based on the results of observations during the learning process, students in class III still have difficulty understanding reading material. They tend to still be at the beginning reading stage. They cannot explain and write down information from the reading they read. Students also still don't understand the question in a problem so the answer they give doesn't match the question. Based on the results of the analysis of daily tests that have been carried out, as many as 55% of students have not reached the Minimum Completeness Criteria (MCC) 78. Researchers also discovered the reasons why reading comprehension skills are still low. First, because learning only uses textbooks. Second, the reading material provided is not interesting for students. Third, lack of habit of reading at school and home. Fourth, students' low interest in reading. which supports literacy activities.

In the learning process, students tend to like activities that utilize learning applications such as media that can be used to convey material content via mobile devices such as Android-based cellphones. Apart from that, students also like kinesthetic learning, such as cutting, cutting and coloring to produce works or products. This shows that the use of technology and learning approaches that involve physical activity can increase students' interest and involvement in the learning process, as well as facilitate their understanding of the material being taught.

Based on the characteristics of students, they need to apply innovative learning models in schools which include reading activities through reading materials in the form of applications and creating works as a basis for learning. According to Pohan et al. (2020) a learning model is a plan or pattern used to help students acquire information, ideas, skills, ways of thinking and express themselves. A learning model is a framework for designing instructions for teachers to carry out the learning process. It is hoped that the application of this learning model can be a tactical step to overcome student learning problems in reading skills.

One learning model that can overcome problems with students' reading skills is the RADEC learning model. There are relevant and related research results relating to the RADEC learning model, including research conducted by Fadhil, (2018) with the title Application of the Radec model to improve learning outcomes for class V SD 1 Wonogiri in science subjects "The results of this research show that the application of the RADEC learning model increases student learning activities, this shows a very good category. Based on that research it can be concluded that research can improve learning activities and outcomes with the RADEC learning model.

The RADEC learning model is a student-centered learning activity by carries out a series of activities for understanding concepts, collaborating, solving problems, and producing ideas/work (Satria & Sopandi, 2019). This model is the answer to meeting current 21st-century skills which require students to have 4C

abilities, namely Critical Thinking and Problem-Solving, Creativity, Communication Skills, and the Ability to Work Collaboratively (Kiska et al., 2024; Maulana et al, 2024; Pratama & Dewi, 2022). This model is a solution for the learning activity process that accommodates students to develop their abilities independently and collaborate with their friends to exchange information and solve problems. Apart from that, this learning model is by the state of education in Indonesia which requires students to understand many lessons in a short time, both material-oriented lessons, namely understanding concepts, and practical lessons oriented with the ability to think creatively. Based on the problems above, the author is interested in overcoming the problem of low reading comprehension skills of students in class III of SDN 036 Ujungberung, Bandung City, Indonesia, using the RADEC model assisted by flipbook media.

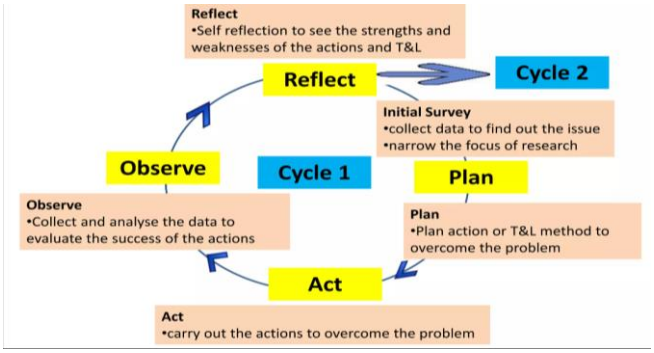
2. Methods

The method used in this research was Classroom Action Research (CAR). This was based on the problems that occurred in Class III of SDN 036 Ujungberung, Bandung City, where most students experienced difficulties in reading comprehension. Even though students were already able to read. However, when given descriptive questions, students had difficulty understanding the descriptive questions and were unable to explain and write information. So, CAR needed to be implemented to resolve this problem.

CAR was research carried out by teachers in the author's class through self-reflection activities, to improve their performance as a teacher to increase students' reading comprehension skills. The PTK model used in this research was the Kurt Lewin PTK model. Kurt Lewin's model was a model that had been the main reference for Classroom Action Research (CAR). Lewin was the first person to introduce action research. Kurt Lewin stated that one cycle of classroom action research consisted of four stages, namely: (1) planning; (2) action (acting); (3) observation (observing); and (4) reflection (reflecting). Due to time constraints, the research was carried out in two cycles. Even during the implementation of two cycles, improvements could be identified. The scheme of the Classroom Action Research model according to Kurt Lewin can be seen in Figure 1.

Figure 1

Kurt Lewin's Classroom Action Research



The subjects in this research were 22 class III students at SDN 036 Ujungberung for the 2022/2023 academic year, consisting of 8 boys and 14 girls. The research instruments used in CAR were divided into two types, namely learning

instruments and data collection instruments. Learning instruments consisted of Learning Implementation Plans, student worksheets, Teaching Modules, and Learning Media. Meanwhile, the data collection instrument consisted of test sheets, observation sheets, and student response questionnaires. The implementation process for each cycle was divided into four stages, namely the planning, implementation, observation, and reflection stages.

The preparation of the plan was based on the results of the initial reflection. In detail, planning included actions that were taken to improve, increase, or change the desired behavior and attitudes as a solution to problems. This planning was flexible, meaning it could change according to existing real conditions. Implementation of actions concerned what was done as an effort to improve, increase, or change which was carried out based on the action plan.

Observation activities could be equated with data collection activities in formal research. In this activity, the results or impact of the actions carried out on students were observed. Reflection was carried out or imposed on students. Reflection was an activity of analysis, synthesis, and interpretation of all information obtained during action activities. In this activity, researchers studied, saw, and considered the results or impacts of actions. Every piece of information collected needed to be studied about each other and its relation to the RADEC learning model.

3. Results and Discussion

Implementation of the actions carried out in cycle I and cycle II showed a significant increase in learning outcomes as expected. This shows an increase in the reading comprehension skills of class III students using the RADEC model assisted by flipbook media, at SDN 036 Ujungberung, Bandung City. Based on the MCC that has been set at SDN 036 Ujungberung, Bandung City, Indonesia. A student is declared to have completed their studies if they have a minimum absorption capacity of 78 and a minimum of 80% classical learning completeness. At the pre-cycle stage, students' learning achievement in reading comprehension learning was 45% and the remaining 55% were incomplete.

In cycle-I after using video learning media, students' learning achievement in reading comprehension learning increased, namely 68% complete and 32% incomplete. Then in cycle II, after using flipbook media in reading comprehension learning, the learning outcomes were 100% complete and 0% incomplete.

Based on classical completeness criteria, it was concluded that the learning outcomes of students in cycle II had achieved completeness. In detail, the increase in students' reading comprehension learning outcomes during the pre-cycle, cycle I, and cycle II are presented in Table 1.

Table 1
Increased reading comprehension of students

Information	Pre Cycle	Cycle I	Cycle II
The number of students	22	22	22
The highest score	90	100	100
Lowest Value	30	60	78
Average value	70	85	90
Students who achieve MCC	10	15	22
Students who do not achieve MCC	12	7	0
Success Presentation	45,45 %	68,18%	100%

Based on Table 1, it can be seen that the increase in learning outcomes and the average value of each cycle can increase, so in cycle II the students' complete learning outcomes in reading comprehension have reached classical learning completeness. This happens because in each cycle the teacher always provides actions that can help students' reading comprehension skills improve (Agustina et al, 2024; Utsman et al, 2022).

Discussion

The findings of this research present a compelling argument for the efficacy of the RADEC learning model when supplemented with flipbook media in enhancing the reading comprehension skills of third-grade students. The data indicating a progressive increase in the percentage of completeness of learning outcomes across the pre-cycle, Cycle I, and Cycle II is particularly noteworthy. This pattern suggests a clear trend of improvement, with all students achieving complete learning outcomes by the end of Cycle II.

One significant aspect highlighted by the study is the role of the RADEC learning model in fostering active student engagement during the learning process. The incorporation of various syntaxes appears to have contributed to this increased engagement, with students demonstrating higher levels of participation and interaction (Daniel et al., 2016). This finding underscores the importance of employing diverse instructional strategies to accommodate different learning styles and preferences among students.

Moreover, the study emphasizes the supportive role of the RADEC learning model in enhancing students' reading comprehension skills. By incorporating the "Read" syntax, students were provided with opportunities to strengthen their comprehension abilities and expand their knowledge base before delving into the subject matter. This approach not only facilitated a deeper understanding of the content but also encouraged critical thinking and information-processing skills among students.

Overall, the results of this research offer valuable insights into the potential benefits of integrating innovative teaching models, such as RADEC, with multimedia tools like flipbook media to optimize student learning outcomes. Moving forward, educators and curriculum developers may consider adopting

similar approaches to enhance the effectiveness of reading instruction and promote active student engagement in the classroom. Additionally, future studies could explore the long-term impact of these instructional methods on students' academic performance and overall learning experiences.

4. Conclusion

After implementing this learning model, it was found that there was an increase in students' abilities in reading comprehension, especially understanding reading texts, especially those related to material on energy changes. The increase in reading comprehension abilities can be seen from student learning outcomes and observation assessment results. Therefore, it is important to share this learning practice as educational material for other teachers in improving students' reading comprehension skills.

Based on the results of learning that has been carried out during three stages, namely pre-cycle, cycle-I, and cycle-II, as well as based on the results of the analysis and discussion that have been described, it is concluded that there is an increase in students' reading comprehension skills through the use of flipbook media in class III SD Negeri 036 Ujungberung. From pre-cycle to cycle 1 it rose by 22.73%, then from cycle 1 to cycle II it rose by 31.82%. This shows that the total increase in presentations from pre-cycle to cycle II was 54.6%. Based on the results of observations during the learning process in cycles I and II, students have demonstrated the ability to extract information from reading and the ability to make conclusions. Thus, "The implementation of RADEC assisted by Flipbook media has a real effect on students' reading comprehension abilities" in class III of SD Negeri 036 Ujungberung.

Suggestion

From the results of this research, researchers provide suggestions for teachers and students, as follows:

a) Teachers who want to use the RADEC (read, answer, discuss, explain, create) model in class can prepare the lesson as fully as possible and prepare the syntax well.
b) Teachers are expected to be able to use learning media according to the characteristics of the students in the class.
c) Teachers are expected to continue to implement innovative learning that is appropriate to the conditions of the school environment and the characteristics of students.
d) Teachers and students must motivate themselves even more in carrying out learning so that learning objectives can be achieved optimally.

Given several limitations in carrying out this research, it would be better to carry out further research that examines the RADEC model assisted by Flipbook media on other subjects, measuring other aspects or different school levels.

5. References

Agustina, N. S., Sopandi, W., & Sujana, A. (2024). Implementation of the Inquiry-Oriented RADEC Learning Model. *Jurnal Penelitian Pendidikan IPA*, *10*(1), 80-91.

Daniel, S. M., Martin-Beltrán, M., Peercy, M. M., & Silverman, R. (2016). Moving beyond yes or no: Shifting from over-scaffolding to contingent scaffolding in literacy instruction with emergent bilingual students. *TESOL Journal*, *7*(2), 393-420.

Fadhil, K. (2018). Pengaruh Model RADEC terhadap Membaca Pemahaman pada Siswa Kelas IV SDN Ballewe Kecamatan Balusu Kabupaten Barru. Education, 53(1), 59-69.

Ikhtiyorovna, K. G. Z. (2023). Mastering the art of effective speaking and reading: strategies for improving speaking and reading skills. *International Journal Of Literature And Languages*, *3*(10), 32-38.

Kiska, N. D., Haryanto, E., & Indryani, I. (2024). Improving Students' Collaboration Skills Using the RADEC Learning Model in Elementary School Science Learning. *Jurnal Pijar Mipa*, *19*(2), 240-247.

Maulana, Y., Sopandi, W., & Kadarohman, A. (2023, June). Development and Validation of The Electronic Student Worksheet Assessment Instrument Based on The 4C Skills Oriented RADEC Lecture Model. In *Proceeding of International Conference on Innovation in Elementary Education* (Vol. 1, No. 1, pp. 273-278).

Mchombo, S. (2019). Verbal Arts as culturally relevant pedagogical tools in math/science education. *Promoting Language and STEAM as Human Rights in Education: Science, Technology, Engineering, Arts and Mathematics*, 17-38.

Mills, C. W. (2020). Language, logic and culture. In *Toward a Sociology of Education* (pp. 515-525). Routledge.

Pohan, A. A., Abidin, Y., & Sastromiharjo, A. (2020). Model Pembelajaran Radec Dalam Pembelajaran Membaca Pemahaman Siswa. In *Seminar Internasional Riksa Bahasa* (pp. 250-258).

Pratama, Y. A., & Dewi, L. (2022). Online Learning Through The RADEC Model to Increase HOTS of Elementary School Students in The Time of The Covid-19 Pandemic. *PrimaryEdu: Journal of Primary Education*, *6*(2), 172-191.

Pratama. (2015). Peningkatan Membaca Pemahaman Siswa pada Teks Deskripsi melalui Problem Based Learning : Penelitian Tindakan Kelas Kolaboratif pada Siswa SMP Negeri 3 Lhokseumawe. *Sintaks: Jurnal Bahasa & Sastra Indonesia*, 2(1), 21–27.

Rosdiana, Y. (2014). Bahasa dan Sastra Indonesia di Sekolah Dasar. Bahasa Dan Sastra Indonesia Di Sekolah Dasar, 1, 1–42.

Santoso, S., & Sunata, S. (2023). Pengaruh Penggunaan Media Fishbone Diagram untuk Meningkatkan Kemampuan Membaca Pemahaman Siswa Sekolah Dasar. *Garda Guru: Jurnal PPG Unpas*, 1-8.

Satria, E., & Sopandi, W. (2019, October). Applying RADEC model in science learning to promoting students' critical thinking in elementary school. In *Journal of Physics: Conference Series* (Vol. 1321, No. 3, p. 032102). IOP Publishing.

Utsman, A., Markhamah, M., Rahmawati, L. E., & Widyasari, C. (2022). Thematic Learning Plans with the RADEC Learning Model in Building Students' Environmental Care Character in Elementary Schools. *International Journal of Elementary Education*, *6*(4), 672-681.