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The RADEC Model: An Innovative Strategy to Enhance Elementary School Students' Reading Interest

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Abstract. The RADEC (Read, Answer, Discuss, Explain, Create) model is an innovative learning strategy designed to actively engage students in the learning process, including literacy aspects. This study aims to analyze the impact of implementing the RADEC model on elementary school students' reading interest. The research was conducted at SDN 202 Suryalaya, Bandung City, involving 27 sixth-grade students. A qualitative approach was employed, with data collected through observations, interviews, questionnaires, and analysis of students' reading interest changes at the initial and final stages of the study. The results showed a significant increase in five aspects of reading interest: reading enthusiasm (from 50% to 75%), literacy habits (from 60% to 80%), engagement in literacy-related book activities (from 40% to 65%), environmental support (from 30% to 70%), and awareness of the benefits of reading (from 50% to 75%). These improvements reflect the success of the RADEC model in creating an interactive, motivating, and supportive learning environment for student literacy development. This research provides a significant contribution to enriching literacy-based learning strategies for elementary education. RADEC is recommended as an effective approach to enhance students' reading interest while fostering a literate generation prepared to face 21st-century challenges.

Keywords: RADEC, strategi inovatif, minat baca, literasi, sekolah dasar

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INTRODUCTION

21st-century education demands a profound transformation in learning approaches to address global challenges and the skills needs of future students (Cobo, 2013; González-Salamanca et al., 2020; Voogt et al., 2013). One critical concern is reading interest, which serves as the foundation for literacy and critical thinking development (Hanipah, 2023). Unfortunately, reading interest in Indonesia remains low. Data from UNESCO indicates that Indonesia's literacy levels are less competitive compared to other Southeast Asian countries (Ahmadi, Kom, Kom, & Ibda, 2021; Solihin, 2020). This highlights the need for innovative learning approaches that not only emphasize academic achievement but also foster students' interest in reading. Through the Kurikulum Merdeka, the government has taken steps to address this challenge by establishing the Profil Pelajar Pancasila, which aims to cultivate an independent, critically reasoning, creative, and character-driven generation. However, the successful implementation of this curriculum relies heavily on relevant and innovative learning strategies.

Recent studies suggest a strong correlation between activity-based learning approaches and increased student engagement, emphasizing the importance of interactive and student-centered pedagogies in modern education (Dai et al., 2024; John & Alaaraj, 2024; Tsai et al., 2020). These approaches not only enhance students' academic performance but also contribute to the development of essential 21st-century skills, such as critical thinking, problem-solving, and collaboration (Carlgren, 2013; Cobo, 2013; Häkkinen et al., 2017;

Haryani et al., 2021; Thornhill-Miller et al., 2023; Xu et al., 2023). One such approach that has gained increasing recognition in Indonesia is the RADEC (Read, Answer, Discuss, Explain, Create) learning model, introduced by Sopandi in 2017. This model was designed to address the limitations of traditional passive learning methods by actively involving students in every phase of the learning process, ensuring deeper comprehension and engagement with the subject matter.

The RADEC model is structured into five progressive stages that guide students through an interactive and inquiry-based learning experience. The “Read” stage allows students to explore various texts and materials, serving as the foundation for subsequent learning activities. This stage encourages independent reading and fosters curiosity by exposing students to diverse sources of information. The “Answer” stage requires students to respond to pre-learning questions, prompting them to think critically and formulate their initial understanding of the topic. This step ensures that students actively engage with the material before classroom discussions take place.

The “Discuss” and “Explain” stages further enhance learning by promoting peer interaction and collaborative knowledge-building. During these stages, students engage in structured discussions, share insights, and clarify concepts through explanation, reinforcing their understanding while developing communication skills. The “Create” stage serves as the culmination of the learning process, where students synthesize their knowledge into tangible outputs, such as projects, presentations, written summaries, or creative storytelling. This stage not only demonstrates students' comprehension but also fosters creativity, self-expression, and a deeper appreciation for learning.

Research has consistently demonstrated the positive impact of the RADEC model on students' cognitive development. Studies conducted by (Handayani, Sopandi, Syaodih, Setiawan, & Suhendra, 2019a, 2019b; Pratama, Sopandi, Hidayah, & Trihatusti, 2020) have shown that RADEC significantly improves students’ conceptual mastery, critical thinking, and creative problem-solving abilities. By engaging students in structured and inquiry-driven activities, this model encourages them to actively construct knowledge rather than passively receive information. Additionally, Pratama et al. (2021) found that the RADEC model enhances students’ motivation to learn through interactive discussions, collaborative problem-solving, and meaningful learning activities. The model’s structured yet flexible nature makes it highly adaptable to various subjects and grade levels, making it a valuable pedagogical tool for elementary and secondary education.

However, while these studies have primarily focused on cognitive skill development, there remains a significant gap in research concerning RADEC’s impact on affective learning

aspects, particularly students' reading interest and literacy engagement. Reading interest is a fundamental factor influencing students' overall literacy development, as it affects reading frequency, comprehension skills, and long-term academic success. Despite the well-documented cognitive benefits of RADEC, limited research has explored how the model influences students' intrinsic motivation to read, their engagement with books, and their overall enthusiasm for literacy activities. Given the urgent need to improve literacy rates in Indonesia and foster a reading culture among elementary school students, further studies are required to examine RADEC's potential in shaping positive reading behaviors and attitudes. Addressing this research gap could provide valuable insights for educators and policymakers seeking to implement evidence-based strategies to improve literacy education. By extending the scope of RADEC research beyond cognitive learning outcomes to include affective and motivational aspects, future studies could offer a more holistic understanding of its impact on student development.

This study addresses this gap by analyzing changes in elementary school students' reading interest through the implementation of the RADEC learning model. Reading interest is defined as the students' inclination to engage voluntarily in literacy activities both within and outside school settings. Five main aspects of reading interest are examined: enthusiasm for reading, literacy habits, participation in book-related activities, environmental support, and awareness of reading benefits. These aspects are considered essential indicators for fostering sustainable literacy habits (Adhari, Hanipah, Rustini, & Arifin, 2022; Supriyanto, 2017).

The study employed a structured application of the RADEC model with grade VI students at SDN 202 Suryalaya, Bandung City, ensuring that each stage of the model was systematically implemented to maximize student engagement and literacy development. The "Read" and "Answer" stages were designed to introduce students to diverse reading materials while fostering active comprehension through guided questions that encouraged them to explore the text more deeply. These stages played a fundamental role in stimulating students' initial interest and curiosity about reading, transforming it from a passive activity into an interactive process.

Following this, the "Discuss" and "Explain" stages emphasized collaborative learning, allowing students to share insights, clarify concepts, and build a deeper understanding through peer interactions. These stages facilitated meaningful discussions, where students not only expressed their interpretations of texts but also developed critical thinking skills by considering multiple perspectives. By engaging in structured discussions, students gained confidence in articulating their thoughts, which further reinforced their motivation to read and engage with various types of literature.

The final stage, “Create,” provided students with an opportunity to synthesize their learning experiences into tangible outputs, such as summaries, reviews, creative storytelling, or literacy projects. This stage not only solidified their comprehension but also encouraged them to see reading as a gateway to creative expression. By applying their knowledge in meaningful and creative ways, students were able to connect reading to real-life contexts, fostering a deeper appreciation for literacy as an essential skill.

The study had two primary objectives. The first was to analyze changes in students' reading interest before and after implementing the RADEC model, identifying shifts in their attitudes, engagement, and reading behaviors. The second was to explore the key factors that either supported or hindered these changes, providing valuable insights into how educators can effectively implement RADEC in various classroom settings. A qualitative research approach was employed, involving 27 grade VI students, teachers, and education experts. Data collection methods included structured interviews, classroom observations, and questionnaire assessments, allowing for a comprehensive analysis of students' reading experiences before and after the intervention.

Unlike previous studies that predominantly focused on the cognitive impact of RADEC, this research placed a stronger emphasis on the affective dimension, specifically examining how the model influenced students' intrinsic motivation and enthusiasm for reading. By shedding light on the emotional and behavioral aspects of reading interest, this study contributes to the broader discourse on literacy-based learning strategies in elementary education. The findings are expected to serve as a practical guide for educators seeking to integrate literacy more effectively into their curricula, particularly in alignment with character education initiatives. Furthermore, this study underscores the importance of fostering a generation of learners who are not only proficient in reading but also deeply engaged in literacy as a lifelong skill, equipping them with the necessary tools to navigate and succeed in an increasingly globalized world.

METHODOLOGY

Research Design

This study employed a qualitative approach to explore the patterns of changes in students' reading interest during the implementation of the RADEC learning model. The qualitative approach was selected for its ability to delve into the deeper meanings of observed phenomena (Creswell, Hanson, Clark Plano, & Morales, 2007; Creswell & Poth, 2016; Sahithi, 2021). Who emphasized that qualitative research seeks to understand events within their natural contexts. The study not only describes students' behaviors but also examines how their experiences with RADEC influence affective aspects, particularly their interest in reading.

The researcher served as the primary instrument, and triangulation techniques were utilized to verify data collected through various methods.

The research was conducted at SDN 202 Suryalaya, located in Bandung City, West Java. This school was chosen because its student characteristics aligned with the research focus, specifically grade VI students who are at a critical stage in their literacy development. The school environment was conducive to the research due to its literacy facilities, including a library, an extensive collection of reading materials, and strong teacher support for literacy programs. The classroom served as the primary setting for data collection during the implementation of the RADEC learning model.

The participants in this study were divided into three main groups: students, teachers, and experts. Twenty-seven grade VI students were selected as the primary focus because of their foundational learning experiences and their critical developmental phase for fostering reading interest. The participating teachers were grade VI educators with over five years of teaching experience, tasked with implementing the RADEC model in the classroom. Additionally, academics specializing in basic education, science, social studies, and the RADEC model were involved to validate research instruments and provide insights into the analysis. Participants were chosen purposively to ensure alignment with the research focus. To uphold research ethics, written permission was obtained from the parents or guardians of all student participants.

The data collection techniques

The data collection techniques in this study employed a combination of methods to ensure accuracy, reliability, and depth in the findings. A mixed-method approach was utilized, integrating both qualitative and quantitative techniques to capture a comprehensive picture of students' reading interest and the effectiveness of the RADEC model in fostering engagement. The primary tools used included pre- and post-lesson questionnaires, in-depth interviews, classroom observations, and documentation analysis, each serving a distinct role in providing valuable insights into students' literacy development.

To measure changes in students' reading interest, pre- and post-lesson questionnaires were administered. These questionnaires assessed five key aspects: enthusiasm for reading, literacy habits, participation in literacy-related activities, environmental support, and awareness of the benefits of reading. The responses provided baseline data before the RADEC model was implemented and allowed for a comparative analysis of shifts in students' attitudes and behaviors following the intervention. This quantitative data offered measurable evidence of the model's impact, making it possible to identify specific areas of growth or stagnation.

In addition to the questionnaires, in-depth interviews were conducted with students, teachers, and education experts. These interviews aimed to explore the participants' perceptions of the RADEC model, providing deeper insights into their experiences, challenges, and observed benefits. Students were encouraged to reflect on their personal reading habits and express how the structured stages of RADEC influenced their engagement with texts. Teachers, on the other hand, provided critical feedback on the practical implementation of RADEC, highlighting its effectiveness in promoting literacy and suggesting potential improvements. Experts contributed academic perspectives, helping to contextualize the findings within broader educational theories and literacy development frameworks.

Observations during the learning process played a crucial role in documenting student behavior at each stage of RADEC—Read, Answer, Discuss, Explain, and Create. These observations focused on the level of student engagement, their interaction with reading materials, and their responsiveness to assigned literacy tasks. Key indicators such as students' active participation in discussions, willingness to share ideas, and enthusiasm in completing creative tasks were carefully recorded. This qualitative data provided valuable context to support the questionnaire findings, offering a more nuanced understanding of how students engaged with reading activities.

To further validate the results, documentation analysis was incorporated, involving the collection of photos, videos, and field notes. These visual and written records captured classroom dynamics, student participation, and teacher facilitation during the RADEC sessions. The inclusion of multimedia documentation strengthened the research by providing concrete examples of student engagement and learning outcomes. The triangulation of these different data sources ensured a more robust and credible analysis, minimizing biases and increasing the reliability of the study's conclusions.

Research Procedure

This research was conducted in four main stages. The first stage, preparation, involved the development and validation of research instruments, such as questionnaires, interview guidelines, and observation formats. Education experts were consulted to ensure the reliability and validity of these instruments. The second stage, learning implementation, focused on applying the RADEC model across five integrated learning sessions for grade VI students. Each session incorporated the RADEC elements—Read, Answer, Discuss, Explain, and Create—designed to motivate students to read and actively participate in the learning process.

The third stage, data collection, was carried out during the learning sessions. Data were gathered through pre- and post-learning questionnaires, interviews with students and teachers, and observations of student behavior throughout the learning process. Finally, the fourth stage,

data analysis, involved a descriptive analysis of the collected data using a triangulation approach. This method integrated the findings from the questionnaires, interviews, and observations to provide in-depth and holistic insights into the impact of the RADEC model on students' reading interest.

RESULTS AND DISCUSSION

This study aimed to analyze changes in elementary school students' reading interest through the implementation of the RADEC learning model. Reading interest plays a crucial role in students' academic success, as it influences their ability to engage with texts, comprehend information, and develop critical thinking skills. To assess the effectiveness of the RADEC model in fostering this interest, data were collected using a combination of pre- and post-learning questionnaires, structured observations, and in-depth interviews with both students and teachers. These methods provided a comprehensive overview of students' engagement with reading activities before and after exposure to the RADEC model.

The findings revealed notable improvements in five key aspects of reading interest: enthusiasm for reading, literacy habits, participation in literacy-related activities, environmental support, and awareness of the benefits of reading. The pre-learning phase indicated that students generally exhibited a moderate level of engagement with reading, often limited to mandatory school assignments rather than voluntary reading for enjoyment. However, after the structured implementation of RADEC, there was a marked increase in students' willingness to read beyond the classroom setting, as they became more proactive in seeking reading materials, participating in discussions, and demonstrating greater appreciation for literacy.

The table below presents a comparative analysis of the average scores for each aspect of reading interest before and after the intervention. These numerical representations illustrate the extent to which the RADEC model influenced students' reading behaviors and attitudes. The increase in scores across all measured categories suggests that this model effectively fosters a more engaging, interactive, and student-centered literacy environment. This transformation underscores the potential of RADEC not only as a tool for improving reading skills but also as a strategy to cultivate a lifelong love for reading among elementary school students.

Table 1. reading interest experienced

Aspect of Reading Interest	Initial Average Score (%)	Final Average Score (%)
Enthusiasm for Reading	50	75

Aspect of Reading Interest	Initial Average Score (%)	Final Average Score (%)
Literacy Habits	60	80
Involvement in Book-Related Activities	40	65
Environmental Support	30	70
Awareness of the Benefits of Reading	50	75

As shown in the table above, each aspect of reading interest experienced significant improvement. The largest increases were observed in environmental support (from 30% to 70%) and involvement in book-related literacy activities (from 40% to 65%).

The diagram below provides a visual comparison of pre- and post-learning scores, offering a clearer representation of the changes in the five aspects of students' reading interest.

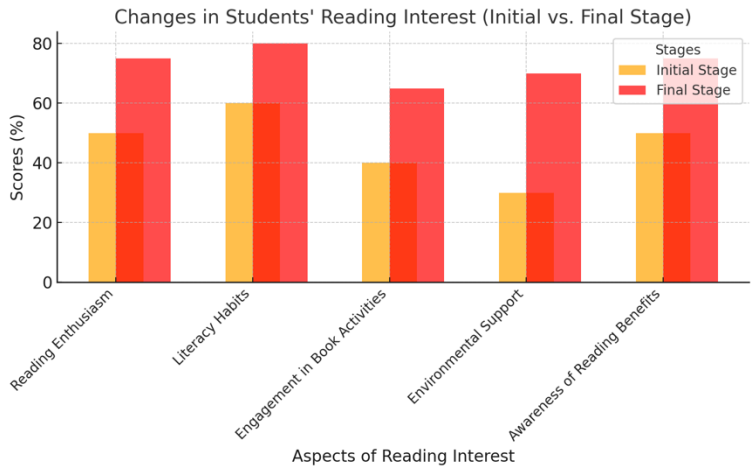

Figure1. Diagram of Changes in Students' Reading Interest

The findings of this study indicate that the RADEC model effectively increases elementary students' reading interest. These results align with previous research demonstrating the effectiveness of RADEC in enhancing student engagement in literacy-based learning (Sopandi, 2017; Septianingrum et al., 2020). However, this study makes a novel contribution by focusing on the affective dimension—reading interest—which has been underexplored in prior RADEC-based literacy research.

Students' enthusiasm for reading showed a significant increase following the implementation of the RADEC model, demonstrating the effectiveness of this structured approach in fostering literacy engagement. Initially, only a small number of students expressed enjoyment in reading, often viewing it as a passive activity limited to classroom requirements. However, after the structured application of the RADEC model, this enthusiasm rose to 75%, indicating a shift in

students' perception of reading as an engaging and meaningful practice. The "Read" stage of the RADEC model played a crucial role in motivating students by introducing enjoyable and structured reading activities, such as guided reading sessions, interactive storytelling, and peer reading groups. These strategies not only captured students' interest but also provided them with a sense of autonomy and curiosity in exploring various reading materials.

Additionally, students' literacy habits improved remarkably, with activities such as reading at home, collecting books, and visiting the library increasing from 60% to 80%. This improvement can be attributed to the independent assignments introduced during the "Answer" stage, which encouraged students to seek additional literacy resources and develop self-directed reading habits. By engaging with diverse texts and answering thought-provoking questions, students became more accustomed to exploring literature beyond their regular schoolwork, reinforcing the habit of reading for pleasure and knowledge acquisition.

Furthermore, student involvement in book-related activities also increased significantly. Before the implementation of the RADEC model, many students rarely participated in literacy events or discussions. However, the "Discuss" and "Explain" stages provided an avenue for students to actively share their thoughts, exchange ideas, and engage in meaningful discussions about the texts they read. These interactions not only deepened their comprehension but also built their confidence in articulating their perspectives, fostering a collaborative and supportive reading culture within the classroom.

Another crucial aspect that saw notable improvement was environmental support from both teachers and parents. Initially, students tended to read only when reminded by educators or guardians. However, by the end of the study, they displayed greater independence in choosing their reading materials, a development largely facilitated by the interactive and immersive classroom atmosphere created through RADEC-based learning. Teachers played an essential role in modeling positive reading behaviors, while parents were encouraged to provide access to diverse reading resources at home, reinforcing a literacy-rich environment.

Finally, students' awareness of the benefits of reading increased from 50% to 75%, indicating a shift in their understanding of reading as more than just an academic requirement. The "Create" stage, which required students to produce work based on their reading, such as book reviews, creative storytelling, or literacy projects, helped them internalize the practical value and relevance of reading in everyday life. This stage empowered students to connect reading with real-world applications, fostering a deeper appreciation for literacy as a lifelong skill.

CONCLUSION

This study revealed that the implementation of the RADEC (Read, Answer, Discuss, Explain, Create) learning model significantly enhances elementary school students' reading interest, demonstrating its effectiveness in fostering engagement, motivation, and literacy development. The results highlighted a notable improvement across five key aspects: enthusiasm for reading, literacy habits, participation in literacy activities, environmental support, and awareness of the benefits of reading. These findings emphasize that RADEC is not only an instructional model that improves cognitive learning outcomes but also a powerful tool for affective learning, particularly in promoting a positive reading culture among young learners.

The RADEC stages played an essential role in shaping students' reading engagement. The "Read" and "Answer" stages significantly contributed to stimulating curiosity and deepening comprehension, as they encouraged students to actively interact with texts, formulate responses, and explore different perspectives. Meanwhile, the "Discuss" and "Explain" stages strengthened collaborative learning and critical thinking, as students engaged in meaningful conversations, shared insights, and built deeper conceptual understanding through peer discussions. The "Create" stage, which allowed students to produce tangible outputs such as book reviews, storytelling projects, and literacy-based assignments, further enhanced creativity, self-expression, and intrinsic motivation to read. Together, these elements formed a holistic literacy experience, reinforcing both skill development and long-term engagement with reading materials.

Theoretically, this research contributes to a deeper understanding of RADEC implementation within the literacy context, particularly in the affective domain, which has been underexplored in previous studies. By shifting the focus from cognitive skill development to reading interest and literacy engagement, this study highlights the importance of integrating structured yet interactive strategies to make reading more meaningful and enjoyable for students. Additionally, it provides empirical evidence supporting the claim that activity-based learning models—such as RADEC—are effective in bridging the gap between passive learning and active engagement in literacy education.

Practically, the findings of this study offer valuable guidance for teachers in adopting effective and engaging literacy strategies that not only encourage students to read but also embed reading habits as a natural part of daily life. The structured yet flexible nature of RADEC makes it adaptable across different subjects and literacy levels, allowing educators to tailor learning experiences to the needs and interests of their students. Furthermore, this study underscores the importance of environmental support, highlighting the role of teachers, parents, and school

infrastructure in fostering a literacy-rich atmosphere that encourages students to develop a lifelong love for reading.

Despite these positive results, this study acknowledges certain limitations, particularly in terms of location and participant scope. Since the research was conducted within a single school setting, the findings may not be fully generalizable to broader populations. Future research should consider a larger and more diverse sample across different schools and educational settings to validate the wider applicability of RADEC. Additionally, subsequent studies could explore the impact of RADEC on other literacy dimensions, such as critical reading skills, creative writing abilities, and digital literacy adaptation, to further assess its effectiveness in different aspects of 21st-century literacy education.

In conclusion, this study affirms that RADEC is a highly relevant and effective learning model for enhancing elementary school students' reading interest. By fostering engagement, motivation, and interactive learning, RADEC serves as a comprehensive solution to address literacy challenges in elementary education. With broader integration into school curricula, RADEC holds great potential to transform literacy instruction, ensuring that students not only develop strong reading skills but also cultivate a lifelong passion for reading and learning.

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