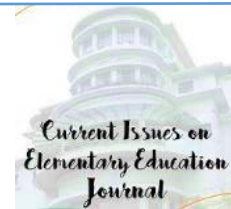




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THE EFFECT OF RADEC MODEL ON STUDENT LEARNING MOTIVATION ON DELIBERATION MATERIALS IN GRADE 2 ELEMENTARY SCHOOL

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ABSTRACT

This study aims to analyze the effect of RADEC (Read, Answer, Discuss, Explain, Create) Model in increasing students' learning motivation on the topic of deliberation in second grade elementary school students. The RADEC model was chosen because it can increase students' activeness in learning, especially on topics that involve group discussions, such as deliberation. The research method used in this study is quasi experimental design with non-equivalent control group design, where students who follow RADEC-based learning are placed in the experimental group, while the control group gets learning using the Flipped Classroom model. The instrument used to measure students' learning motivation is a questionnaire consisting of 10 items to assess the level of motivation. The results showed that students who took part in learning with the RADEC Model had very high learning motivation, with a percentage reaching 91.30%. This shows that the application of the RADEC Model can significantly increase students' learning motivation in deliberation lessons. Therefore, it can be concluded that the RADEC Model plays an effective role in increasing student learning motivation, especially in group discussion-based learning such as deliberation

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1. INTRODUCTION

In the 21st century, learners are faced with developing and intense global competition (Khahro & Javed, 2022). In a fast-paced world, technology is constantly expected that learners can improve their abilities and skills (Molnár, 2024). The development of 21st century skills such as critical thinking, problem solving, and communication skills (Miliou et al., 2024). To create a generation that is able to compete nationally and globally in facing the challenges of a world that continues to develop (Hu, 2024). But in creating it, there are many challenges. Participatory learning as learning that involves learners in activities optimally (Santos et al., 2023). But what happens is that learners cannot participate (Korfiatis & Petrou, 2021).

Motivation to learn is an encouragement that comes from within and from outside students who are able to provide a sense of pleasure and enthusiasm in the learning process so that students can achieve very good learning achievements (Urhahne & Wijnia, 2023). While the motivation of students in elementary schools at this time is very worrying, many students do not want to be directly involved in the learning process. Someone who does not have motivation in learning is unlikely to carry out learning activities (Urhahne, 2021). So that it will affect learning.

Motivation that is born as a result of internal factors is called active motivation, whereas motivation that arises as a result of external factors is called passive motivation (Bandhu et al., 2024). Learners today do not have a great desire from themselves to learn, feel that learning is not important, or feel bored and do not want to do various kinds of activities (Danielson et al., 2023; Lichtenfeld et al., 2022). This is the beginning of learners experiencing difficulties and will continue with subsequent difficulties. After experiencing this, the abilities that are expected to emerge in the learning process will experience obstacles every day.

Learning motivation in primary school students is certainly influenced by various interrelated factors (Christodoulou et al., 2024). According to (Bahua et al., 2022) The following factors influence students' learning motivation: 1) students' ideals and aspirations; 2) their abilities; 3) their conditions; 4) their environmental conditions; and 5) dynamic elements in learning and teaching. This low motivation is one of the obstacles in achieving learning objectives at the school unit level (Usán et al., 2019).

Data obtained from school education report cards in 2024 showed that there was a decline in the quality of learning, especially in the aspect of learning methods. This decline can have an impact on low learner motivation and result in a lack of learner engagement in learning. This reduces learners' enthusiasm for learning and inhibits the basic skills that learners should have. Student motivation in learning can be improved through various models and approaches (Wijnia et al., 2024). Therefore, an innovative learning method is needed that can be a solution in increasing motivation which is expected to encourage students to be actively involved in every learning process that takes place.

The RADEC (Read, Answer, Discuss, Explain, Create) learning model can be considered an ideal learning model in the sense that it seeks to accommodate various important issues in learning both current and old but still appropriate and important to be accommodated in even the latest learning (Fatimah et al., 2024; Sopandi et al., 2021). This model was developed in order to reactivate student involvement in learning activities as a whole and provide opportunities for students to think critically and creatively (Anwar et al., 2024; Putri & Sukmawati, 2024). In each stage in this learning model, it is clear that students must be active and directly involved (Musliha et al., 2024). Where students read each, answer questions, discuss, explain and create learning products from the results of the activity process they have done (Firman et al., 2024).

Based on that, this research is important to be carried out in order to provide solutions to low student learning motivation that can hinder the development of abilities needed to be developed in learning, especially 21st century skills which are considered very important to be mastered by all students. This study will discuss the effect of RADEC learning model in grade 2 elementary school which is expected to provide empirical evidence about the role of this model in increasing students' learning motivation. With a supportive learning model, it is expected that learners can be engaged in the learning process and ultimately improve the quality of learning in schools and achieve the objectives of the education unit curriculum and the national curriculum.

2. METHODS

This study used an experimental quantitative approach to examine the effect of the RADEC model on student learning motivation. This research is to see the role of the RADEC model on student learning motivation. The research design used was a quasi-experiment by dividing students into experimental and control classes. The experimental class used the RADEC model and the control class used the Flipped Classroom model.

This research was carried out at an elementary school in Bandung City, with participants comprising 46 students. These students were split into two equal groups, with 23 placed in the experimental class and the remaining 23 in the control class.

Data was collected using a questionnaire designed to measure the level of learning motivation. Indicators of motivation according to consist of 1) Active involvement in learning activities, 2) Perseverance in facing challenges, 3) Independence in learning, 4) Seeking feedback from teachers and friends, and 5) Motivation for achievement or recognition. Data was collected from a Likert scale questionnaire with five levels ranging from strongly disagree to strongly agree, the total score was then classified into five categories of motivation levels: very low, low, high, and very high.

The procedures carried out are 1) preparation stage: preparation of questionnaires, delivery of initial information to students and teachers involved, 2) Implementation of learning: experimental class learning using the RADEC model. With the stages of Read, Answer, Discuss, Explain, and Create. Then the control class uses the Flipped Classroom model. 3) Data collection, namely students filling out a learning motivation questionnaire after learning is complete. 4) Data processing, namely analyzing and grouping based on the scores of each learner and comparing the experimental class and control class.

Data dianalisis secara deskriptif dan inferenial untuk mengetahui distribusi tingkat motivasi belajar siswa (Eybarda et al., 2024). Distribusi data menunjukkan mayoritas siswa dalam kelas eksperimen memiliki tingkat motivasi yang sangat tinggi dibandingkan kelas kontrol (Zhang et al., 2023).

An analysis combining descriptive and inferential techniques was conducted to determine the distribution of student learning motivation levels. The data distribution shows that the majority which showed that students exposed to the RADEC model in the experimental class had a considerably higher motivational level than those in the control class.

3. RESULTS AND DISCUSSION

3.1 Results

The data revealed a distinct difference in the distribution of student motivation levels between the experimental and control classes. In the experimental group, where the RADEC model was implemented, 91.3% of students demonstrated very high motivation, while the remaining 8.7% were categorized as having high motivation. Notably, there were no students in the moderate, low, or very low categories. In contrast, the control group, which followed the Flipped Classroom approach, showed a slightly more varied distribution: 83.3% of students reached very high motivation, 12.5% had high motivation, and 4.17% fell into the moderate category. These findings suggest that students exposed to the RADEC model not only reached higher levels of motivation but also displayed a more consistently strong engagement in the learning process compared to their peers in the control class

3.2 Discussion

The main focus of this study is to analyze how much influence the use of the RADEC model has on student learning outcomes. motivation on deliberation material in grade 2 elementary school. The results showed the distribution of students' learning motivation levels as follows: 1) Experiment Class: A total of 91.30% of students (21 out of 23 students) reached the very high motivation level, and 8.70% of students (2 out of 23 students) were at the high motivation level. No students with very low, low, or medium motivation were found. 2) Control Class: A total of 83.33% students (20 out of 23 students) reached a very high level of motivation, 12.5% students (3 out of 23 students) were at a high level of motivation, and 4.17% students (1 out of 23 students) were at a moderate level of motivation.

From the results obtained, it can be seen that the experimental class with the RADEC approach is interesting a greater proportion of students with very high motivation than the control class using conventional learning methods.

The results of this study indicate that the RADEC learning model significantly increases students' learning motivation compared to conventional learning methods. With five stages, namely Read, Answer, Discuss, Explain, and Create, the RADEC model creates a learning process that involves students actively and interactively. This is in accordance with constructivist learning theory which states that students' active involvement in learning can increase intrinsic motivation.

The significant difference in motivation levels between experimental and control classes can be explained by the RADEC strategy that emphasizes initial understanding (Read), group discussion (Discuss), as well as active explanation (Explain) which fosters self-confidence and the desire to learn more. In contrast, conventional methods tend to be passive, so they are less able to encourage students to be actively involved.

The results obtained strengthen the evidence from previous studies that interaction and active participation-based learning models, such as RADEC, are effective in increasing

students' learning motivation. Moreover, this result confirms the importance of student-focused learning approaches in improving their learning outcomes and motivation.

From the table below, it was revealed that there was an increase in learning motivation among students in the experimental class. showing very high motivation. In the experimental class there was a very high increase compared to the control class. Overall, learning through the RADEC model makes children more motivated in the ongoing learning process. In the experimental class there were no students with moderate motivation. So that learning by using the RADEC model makes students more motivated again in the learning process.

Table 1. Overall percentage

No	Skor	Description	Percentage of All Students			
			Experiment Class		Control Class	
			amount	Percentage	amount	Percentage
1	1-10	Very low motivation	0	0%	0	0%
2	11-20	Low motivation	0	0%	0	0%
3	21-30	Moderate motivation	0	0%	1	4,17%
4	31-40	High motivation	2	8,70%	3	12,5%
5	41-50	Very high motivation	21	91,30%	20	83,33%

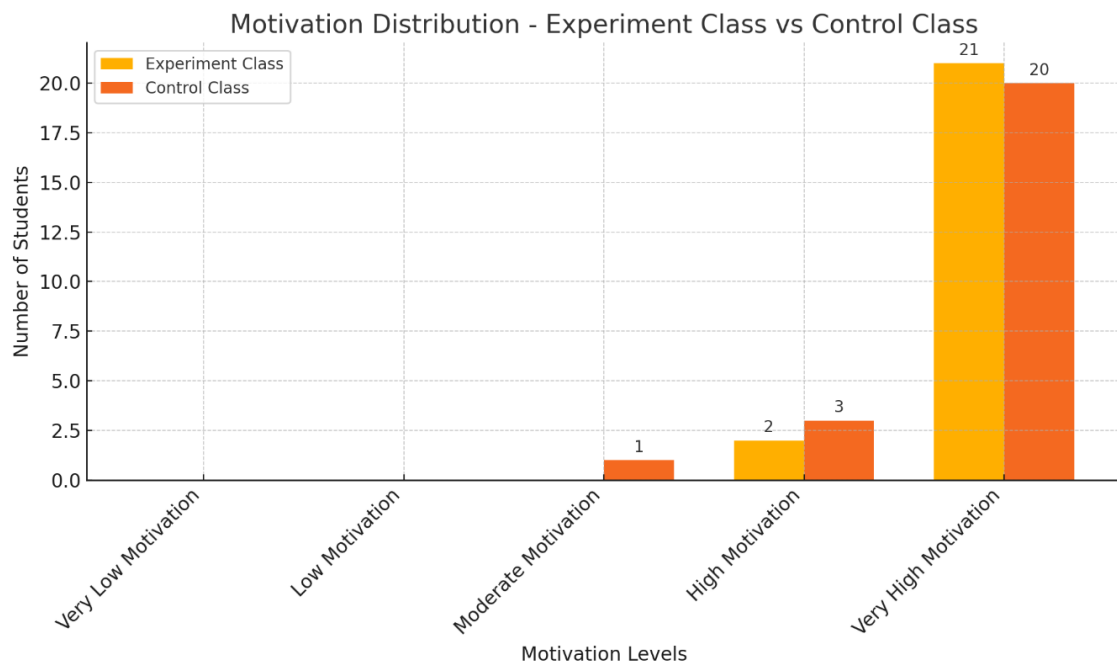


Figure 1. Motivation Levels

The bar chart above shows the distribution of student motivation between the experimental and control classes. In the experimental class, 91.3% of students had very high motivation (21 students), and 8.7% of students had high motivation (2 students). Meanwhile, in the control class, 83.3% of students had very high motivation (20 students), 12.5% of students had high motivation (3 students), and 4.17% of students were at moderate motivation (1 student). This shows that the experimental class had a better distribution of motivation, with more students reaching the very high motivation level than the control class..

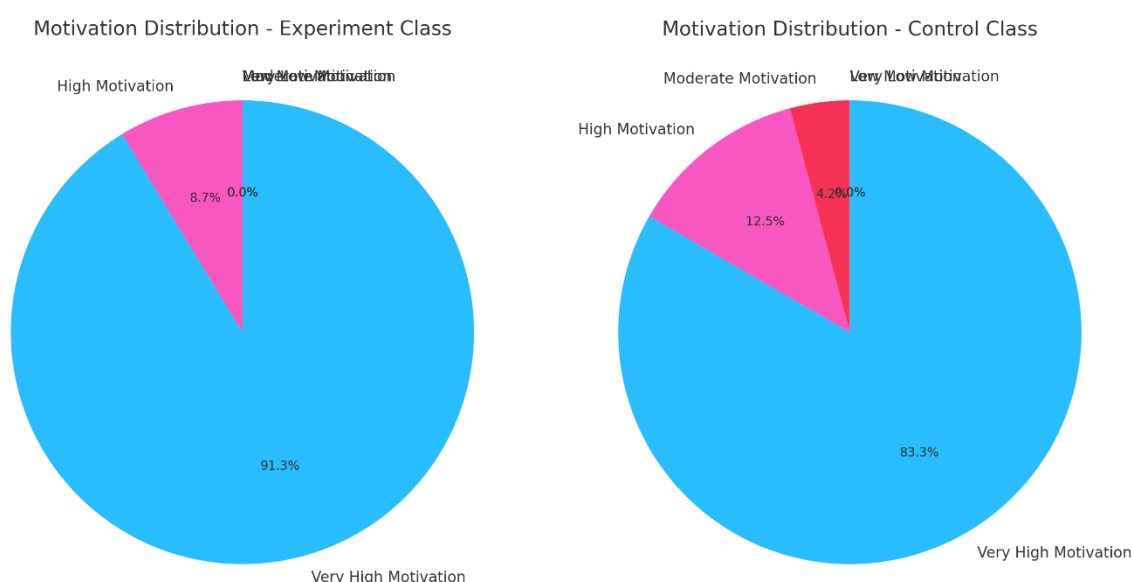


Figure 2. Motivation Distribution

Based on the pie chart, the distribution of student motivation between the experimental and control classes shows differences. In the experimental class, 91.3% of students had very high motivation, while 8.7% had high motivation. There were no students who belonged to the medium, low, or very low motivation categories. This shows that through the RADEC model provided in the experimental class, it succeeded in encouraging almost all students to reach a very high level of motivation. On the other hand, the control class also showed good results, with 83.3% of students having very high motivation, 12.5% of students having high motivation, and 4.2% of students being in the medium motivation category. There were no students in the low or very low motivation categories in the control class. Although the control class had quite good results, the distribution of motivation in the experimental class was more optimal, as almost all students were at the very high motivation level. This difference shows the influence of the RADEC model given in the experimental class in increasing student motivation compared to the control class..

5. CONCLUSION

The results of this study indicate that the RADEC learning model has a significant effect on increasing students' desire to learn deliberation material in grade 2 of elementary school. As shown by the data, the majority of students in the experimental class (91.30%)

showed a very high level of desire to learn compared to students in the control class (83.33%).

Data analysis shows that the RADEC model is not only effective in increasing students' learning motivation in general, but also able to encourage students' active involvement in the learning process. This can be seen from the dominance of highly motivated students in the experimental class compared to the control class, although the number of highly motivated students was not significant. No students with very low or low motivation were found in either class, indicating that in general, the learning has been successful in increasing students' motivation.

The results show that the RADEC learning model is effective and can be used as an alternative in increasing students' learning motivation, especially for materials that require active participation such as deliberation. This study suggests the use of the RADEC model in elementary school learning. This will make learning more interactive and encourage students to be self-directed.

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