

Enhancing students' interest in Physical Education through the integration of Social Emotional Learning and Problem-Based Learning

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Abstract

Research Problems: This research was conducted based on the low level of students' interest in physical education learning. The current physical education learning process has not been able to fully accommodate students' needs and interests, resulting in low engagement and enthusiasm in learning. Teaching that integrates the Social Emotional Learning (SEL) approach with the Problem-Based Learning (PBL) model is expected to facilitate diverse student characteristics and learning interests. **Research Objectives:** This study aimed to determine the improvement of students' learning interest in physical education through the integrated SEL-PBL approach. **Methods:** The research employed a Classroom Action Research (CAR) design conducted in two cycles, each consisting of four stages: planning, implementation, observation, and reflection. Data on learning interest were collected using a learning interest questionnaire and analyzed both quantitatively and qualitatively. **Results:** The results showed that the average percentage of students' learning interest before the intervention was 51.5% (low), which increased to 56.25% (moderate) after the first cycle, and further improved to 86.75% (high) after the second cycle. **Conclusion:** Therefore, integrating the SEL approach within the PBL model can effectively enhance students' interest in learning physical education.

Keywords: Social Emotional Learning; Problem-Based Learning; Learning Interest; Physical Education; Classroom Action Research.

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INTRODUCTION

Education in Law Number 20 of 2003 is interpreted as an effort in the form of various planned actions to create a comfortable, safe learning environment and learning that is on the side of students so that they can actively grow their potential in gaining intellectual, religious, social-emotional strength, and also the skills they need in society and the state (Pristiwanti et al., 2022). Central to education are teaching and learning activities within schools, which are fundamental to achieving educational

objectives. The success or failure of these objectives significantly depends on the learning process experienced by students. Students are unique individuals with distinct characteristics and needs that must be met. A need, when sufficiently intense, serves as a strong impulse, and its fulfillment is driven by an underlying motive.

A high level of learning interest directly correlates with a student's willingness to actively participate in class (Rahmad et al., 2021). When students are highly interested, they are more likely to engage in learning activities, deepen their understanding of the subject matter, and develop meaningful comprehension, enabling them to apply learned material in real life. Januareva, (2023) interest is a form of self-mastery encompassing feelings, pleasure, tendencies, and unplanned ambitions scientifically activated to acquire something from the external environment. Learning interest is typically gauged by four indicators. feelings of pleasure, genuine interest, sustained attention, and active student involvement in learning (Maulana et al., 2020). An increase in students' learning interest leads to improved academic performance, indicating a direct positive relationship between the two (Nurhasanah & Nida, 2016). Learning outcomes themselves represent measurable changes in an individual's or student's behavior, manifested as knowledge, skills, or attitudes (Marsiyem et al., 2018).

Despite the critical role of learning interest, many junior high school students still exhibit low interest in physical education material. One primary reason is the monotonous and undifferentiated learning models and approaches employed by teachers, which often fail to cater to individual student needs. Teachers frequently assume uniform student abilities, leading to a "one-size-fits-all" teaching approach for students across varying skill levels. Consequently, the learning process often does not align with each student's unique capabilities. It is imperative for teachers to recognize that every student possesses distinct characteristics and abilities that require tailored facilitation during learning (Hastutiningtyas et al., 2021). Therefore, the selection of learning models should always be based on student characteristics to optimize learning outcomes (Septiana, 2017).

The demands of 21st-century education necessitate learning environments that are student-centric and foster social-emotional competence, a vital skill for everyone, especially students. A student's capacity to learn effectively extends beyond direct teacher instruction; it is also influenced by factors such as a supportive school environment, constructive feedback, and positive relationships among school community members, including teachers, staff, and peers (Ramadhani et al., 2023). Conversely, low social-emotional competence can negatively impact academic ability and contribute to disruptive classroom behavior. In response to this, CASEL (Collaborative for Academic, Social, and Emotional Learning) has developed a framework, known as Social Emotional Learning (SEL), designed to enhance both students' social-emotional competencies and their academic abilities to achieve educational goals (Putri et al., 2025). Therefore, teachers must integrate SEL into their instruction to cultivate robust social-emotional competencies in students, thereby boosting their interest and learning outcomes. The five core social-emotional competencies that teachers can integrate into learning are Self-Awareness, Self-Management, Social Awareness, Relationship Skills, and Responsible Decision-Making (Prasanti & Wijayanti, 2023).

Based on observations and case studies conducted by the researchers at SMP Negeri 35 Palembang School, several prominent issues in Physical Education, Sports, and Health learning were identified. Firstly, a significant number of students struggled with learning, demonstrating reluctance and difficulty in understanding movement sequences despite repeated explanations from the teacher using the same method. Secondly, many female students showed a lack of enthusiasm and interest in physical education, tending to be passive compared to their male counterparts. Lastly, while less prevalent than during online learning, some students remained inactive in learning activities. These observed disparities in student motivation and the learning obstacles faced highlight a critical gap in current pedagogical practices, particularly when compared to findings from more recent international studies advocating for personalized and engaging learning environments. Addressing these challenges requires a

focused intervention. Therefore, this research aims to investigate these issues and is titled "Integrating SEL and PBL to Enhance Student Interest in Physical Education Learning.

METHOD

Research Design

This research is a type of classroom action research that aims to determine the increase of students' learning interest and learning outcomes through the application of the SEL approach with the PBL model. The research is carried out during January 2025 until March 2025. Each cycle consisted of four sequential stages, namely planning, action, observation and reflection, as illustrated below:

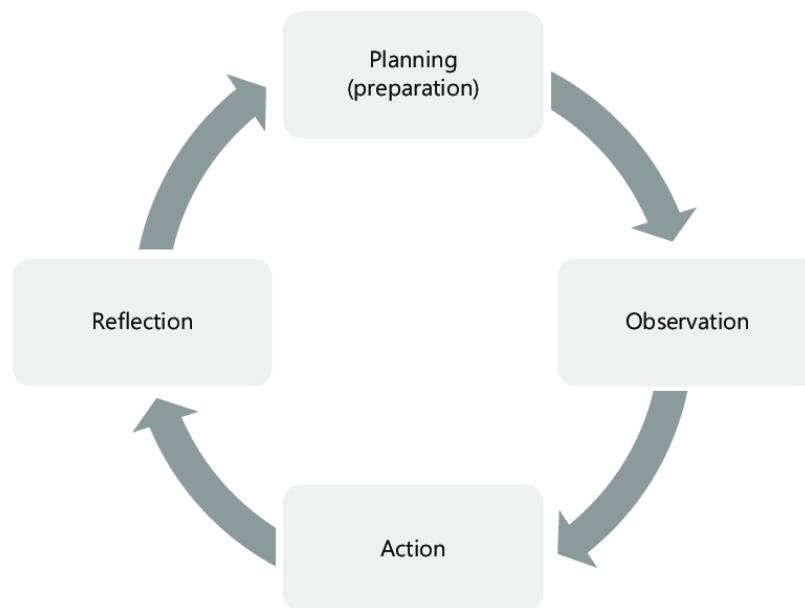


Figure 1. Stages of Classroom Action Research

Participants

This research is divided into two cycles with a total of 30 research subjects, all students from grade VIII at SMPN 35 Palembang.

Research Instruments

Non-test data collection techniques were primarily carried out using a student learning interest questionnaire. This questionnaire served as the primary research instrument to assess students' responses to the learning interventions both before and after the implementation of the SEL-PBL

model. The questionnaire utilized a closed-ended format with a Likert scale. The instrument comprised a total of 20 items, designed to measure four key dimensions of learning interest: feelings of pleasure, genuine interest, sustained attention, and active student involvement in learning. The responses were then categorized based on the following criteria:

Table 1. Criteria for students' learning interests

Interest Score (100%)	Category
76%-100%	High
56%-75,9%	Medium
0%-55,9%	Low

The average calculation of the questionnaire results was performed using the following formula:

$$x = \frac{\sum X}{N} \quad (1)$$

x = average

X = total interest questionnaire calculation

N = Number of Students

Data Analysis

Beyond these descriptive measures (mean percentages and categorization), the data collected from the learning interest questionnaire were further analyzed to determine the statistical significance of the observed improvements. This comprehensive statistical analysis aimed to provide robust evidence for the effectiveness of the integrated SEL-PBL approach.

RESULTS

Through this research, the implementation of learning consisting of 2 cycles with the implementation of cycle 1 and cycle 2 was produced as follows. In the planning of the 1st cycle of actions, teachers carry out non-cognitive diagnostic assessments to find out the characteristics of students. The following is the data from the score analysis of the percentage of achievement of each aspect of student interest.

Table 2. Results of analysis of pre-cycle students learning interest indicators

Indicators	Item Number	Percentage	Information
Feeling Good	1-5	53%	Low
Student Interest	6-10	57%	Medium

Indicators	Item Number	Percentage	Information
Student Attention	11-15	47%	Low
Student Engagement	16-20	49%	Low
Average		51,5%	Low

Based on the data in the table 2, the results show that the overall average percentage of students' learning interest before the implementation of the SEL-PBL approach was 51.5%, which falls into the low category. Specifically, the feeling good indicator obtained a score of 53% (low), indicating that students had not yet experienced comfort and enjoyment during physical education learning. The student interest indicator reached 57% (medium), showing that some students had begun to show curiosity and enthusiasm, although it was still not optimal. Meanwhile, the student attention (47%) and student engagement (49%) indicators were both categorized as low, reflecting that many students were still less focused and not actively involved in the learning process. These findings suggest that the learning atmosphere and instructional approach at the time had not been able to fully attract students' attention or stimulate active participation in physical education activities.

Table 3. Results of analysis of cycle I students' learning interest indicators

Indicators	Item Number	Percentage	Information
Feeling Good	1-5	61%	Medium
Student Interest	6-10	59%	Medium
Student Attention	11-15	54%	Low
Student Engagement	16-20	51%	Low
Average		56,25%	Medium

The results in the table 3 indicate that the overall average percentage of students' learning interest in Cycle I was 56.25%, which falls into the medium category. Among the indicators, feeling good achieved the highest score with 61% (medium), showing that students began to feel more comfortable and positive during physical education activities. The student interest indicator obtained 59% (medium), suggesting an increase in students' enthusiasm and curiosity toward the learning process. However, the student attention (54%) and student engagement (51%) indicators remained in the low category, indicating that students' focus and active participation had not yet reached the desired level.

Table 4. Results of analysis of cycle II students' learning interest indicators

Indicators	Item Number	Percentage	Information
Feeling Good	1-5	92%	High
Student Interest	6-10	86%	High
Student Attention	11-15	84%	High
Student Engagement	16-20	85%	High
Average		86,75%	High

The results in the table show that the overall average percentage of students' learning interest in Cycle II reached 86.75%, which is categorized as high. All indicators demonstrated significant improvement compared to the previous cycle. The feeling good indicator obtained the highest score of 92% (high), indicating that students felt more comfortable, confident, and happy during physical education activities. The student interest indicator reached 86% (high), reflecting a strong enthusiasm and motivation to participate in learning. Likewise, student attention (84%) and student engagement (85%) were both categorized as high, suggesting that students were more focused, involved, and actively participated in every stage of learning.

The bar chart shows an increase in students' learning interest after applying the SEL-PBL integrated model. In the Pre-Cycle, interest was 51.5% (low), rising to 56.25% (medium) in Cycle I and 86.75% (high) in Cycle II. This steady improvement shows that integrating Social Emotional Learning with Problem-Based Learning effectively enhances students' enthusiasm, attention, and engagement in physical education.

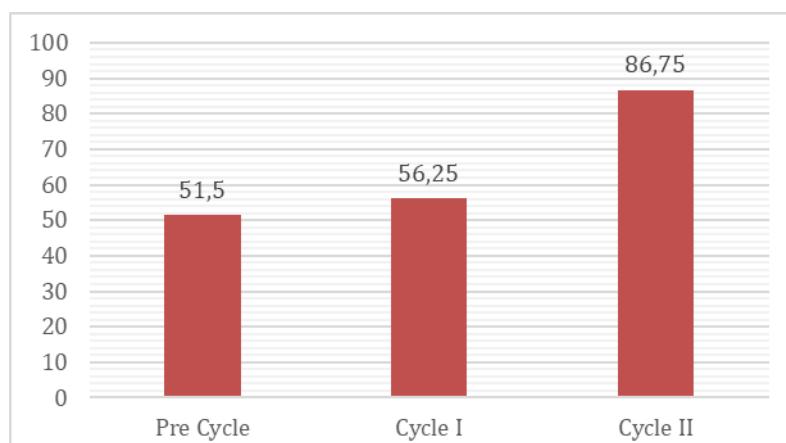


Figure 2. Increasing students' interest in learning

DISCUSSION

Physical Education (PE) play a strategic role in fostering physically, emotionally, and socially healthy students. However, in practice, PJOK lessons are often seen as supplementary, leading to consistently low student interest. This low interest can result in a lack of active participation, minimal involvement in practical activities, and a decrease in overall learning outcomes. This study demonstrates that integrating the Problem-Based Learning (PBL) model with the Social Emotional Learning (SEL) approach significantly influences increased learning interest among eighth-grade students at SMP Negeri 35 Palembang. Through PBL, students are directly involved in contextual, collaborative, and problem-solving-oriented learning. SEL integration helps learners develop crucial social, emotional, and personal responsibility skills, which indirectly create a positive and conducive learning atmosphere. The results from Cycle I and Cycle II show a tangible increase in student learning interest: initially passive and limited, student involvement surged in the second cycle with increased enthusiasm, activeness, and responsibility in completing learning projects. Students showed initiative in planning exercises, documenting movements, and creatively communicating results individually and in groups. This higher interest level allows students to achieve more optimal learning goals, aligning with opinion about assertion that a lack of interest impedes learning success, and emphasis that greater interest leads to broader knowledge and better learning outcomes. These findings are reinforced by prior studies, such as [Jannah et al., \(2023\)](#) which showed PBL significantly increasing PJOK interest at SDN 188 Pekanbaru, and Scott, Scott, and Scott, 2024. who found PBL boosted both interest and learning outcomes at SMPN 3 Sape. [Aji et al. \(2024\)](#) also reported that PBL through Mind Mapping increased creativity and involvement in PJOK, consistent with the subject's focus on motor skills. [Zoki & Prasetyo, \(2023\)](#) noted that applying Pancasila Student Profile values via PBL improved overall student learning outcomes across cognitive, affective, and psychomotor aspects. Internationally, [Reichl, \(2017\)](#) affirmed that SEL integration in project-based learning boosts emotional and social engagement, directly enhancing learning interest and

academic performance. While these results highlight the effectiveness of the integrated PBL-SEL model, it's crucial to consider external variables that may also influence the increase in student learning interest. Teacher factors, including teaching style, enthusiasm, and ability to foster a supportive classroom environment, significantly impact implementation success. A conducive classroom, with peer support and adequate physical activity facilities, also contributes to student comfort and motivation. Positive teacher-student interactions and effective classroom management can further amplify this approach's positive effects. Thus, the PBL model integrated with SEL is not only relevant to Merdeka Curriculum needs but is also proven to significantly increase PE learning interest, fostering active, contextual learning experiences and strengthening student character, ultimately improving overall learning quality.

CONCLUSION

The study concludes that integrating the Social Emotional Learning (SEL) approach with the Problem-Based Learning (PBL) model effectively increases students' interest in learning physical education. This integration encourages greater participation, responsibility, creativity, and teamwork, while fostering a positive and inclusive learning environment. The improvement from Cycle I to Cycle II demonstrates that the SEL-PBL combination enhances students' cognitive, psychomotor, and character development in line with 21st-century learning goals and the Independent Curriculum. To ensure effective implementation, it is recommended that teachers receive training on SEL-PBL integration, curriculum alignment be strengthened, sufficient learning resources be provided, and collaborative lesson planning be encouraged. However, since this study was conducted in a single school with a limited sample size, its findings cannot be generalized. Future studies should involve a larger population, apply mixed-method designs, and explore teachers' perspectives as well as external factors that may influence student engagement and learning outcomes.

AUTHOR'S CONTRIBUTION

Aji Dwi Rogo 1: Writing - Review & editing. **Syamsuramel**: Methodology. **M. Armando Yusaromi** 3: Software and Writing - Original Draft.

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