

IMPROVING THE QUALITY OF SOCIAL STUDIES LEARNING: THE IMPLEMENTATION OF PROBLEM-BASED LEARNING FOR THE INTELLECTUAL AND EMOTIONAL INTELLIGENCE OF ELEMENTARY SCHOOL STUDENTS

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ABSTRACT

This study is motivated by low learning motivation and limited development of intellectual and emotional intelligence in Social Studies (IPS) learning at SDN 034 Tarai Bangun. The teaching of IPS, which is still dominated by passive lecture methods, leads students to be less cognitively and affectively engaged, thereby hindering the development of critical thinking skills, collaboration skills, and emotional regulation. This issue led the researcher to explore the implementation of the Problem-Based Learning (PBL) model as an innovative solution that can simultaneously integrate the development of learning motivation, intellectual intelligence (IQ), and emotional intelligence (EQ). This study aims to analyze the implementation of the PBL model in IPS learning and to explain its impact on the improvement of the learning motivation, intellectual intelligence, and emotional intelligence of fourth-grade students at SDN 034 Tarai Bangun. The research method is a qualitative case study design. Data collection techniques include participatory observation of the learning process, in-depth interviews with teachers and students, and documentation of the Lesson Plan (RPP) and student work results. The results of the study indicate that: (1) The implementation of PBL takes place through five phases that progressively foster student independence in defining and solving problems; (2) PBL successfully increases students' intrinsic learning motivation due to the relevance of authentic problems presented in relation to their life experiences and the autonomy provided in the inquiry process; (3) Students' intellectual intelligence develops through the strengthening of critical and analytical thinking skills, which is evident from the improved quality of the arguments and solutions they formulate. This study concludes that PBL is an effective integrative learning strategy to create a holistic learning environment that simultaneously develops learning motivation, IQ, and EQ at the elementary school level.

Keywords: PBL, Learning Motivation, IQ, Emotional Intelligence (EQ), Elementary

INTRODUCTION

Social Studies Education (IPS) at the Elementary School (SD) level plays a crucial role in shaping literate citizens, raising environmental awareness, and enabling active participation in the global community (Nurhadi, 2021) The fundamental goal of IPS education is not merely the

transfer of information, but also the development of critical thinking skills, logical reasoning, and problem-solving, which are central to the Intellectual Intelligence (IQ) of students (Santrock, 2018). Furthermore, the demands of 21st-century education emphasize that student success is strongly influenced by Emotional Intelligence (EQ), the ability to manage oneself and interact socially effectively. This must be holistically integrated into every subject, including Social Studies (IPS) (Goleman, 2020). Therefore, a learning model is needed that can facilitate the achievement of these dual objectives.

Although the ideal demands of Social Studies (IPS) education are high, its implementation in the field often faces significant challenges. Initial observations at SDN 034 Tarai Bangun, particularly in Grade IV, indicate that IPS learning tends to be dominated by passive, teacher-centered lecture methods that are less engaging, leading to low cognitive involvement among students. (D. Hartono & Pratiwi, 2021). The direct impact of this passive method is a decline in students' learning motivation, as evidenced by a lack of initiative to ask questions and complete tasks independently. This gap in methodology also leads to the slow development of EQ aspects, such as collaboration skills, empathy, and emotional regulation, as students are rarely confronted with group situations that require conflict resolution and effective communication. (Setyawan & Suryani, 2022).

To bridge the gap between ideal conditions and the reality of learning at SDN 034 Tarai Bangun, this study proposes implementing the Problem-Based Learning (PBL) model. PBL is defined as an approach that places real-world problems at the starting point of learning, which intrinsically encourages students to think critically, seek resources, and engage in intensive discussions (Arends, 2018). Cognitively, PBL is efficacious in improving students' IQ aspects through the practice of analyzing and synthesizing complex information. (Agustina & Wijaya, 2023). Furthermore, through group work, a characteristic of PBL, students are compelled to develop social skills and emotional intelligence, making this model an explicit platform for the integrated development of both IQ and EQ.

Numerous previous studies have confirmed the effectiveness of Problem-Based Learning in elementary education, though with varying foci and approaches—a meta-analysis study conducted by Sa'diyah et al. (2024). A meta-analysis of 25 research articles in Indonesia found that the implementation of the PBL model significantly and strongly impacts the development of critical thinking skills in elementary school students, indicating that this model

has strong empirical validity in shaping high-level cognitive competencies. In line with these findings, Azkia et al. (2025) It has been proven through classroom action research that the implementation of PBL assisted by audiovisual media in Social Studies learning for Grade V successfully improved students' critical thinking skills progressively, from 35% in the pre-cycle to 85.7% in the third cycle, while also improving the quality of teacher and student activity observations to 92% and 85%, respectively. On the other hand, Rahmadhani & Sukarjo (2020), Exploring the emotional intelligence variable in Social Studies learning through a correlational quantitative approach, found that emotional intelligence has a positive and significant relationship with Social Studies learning outcomes ($r = 0.350$), with a more substantial contribution when combined with digital literacy ($R = 0.489$).

Although these three studies provide valuable empirical evidence, there is a fundamental research gap: first, the study. Sa'diyah et al. (2024) and Azkia et al. (2025) It only focuses on the cognitive aspect (critical thinking) without exploring affective dimensions such as emotional intelligence in depth within a single integrated research framework; second, the research. Rahmadhani & Sukarjo (2020) It uses a quantitative approach that measures correlation but does not explore the process and dynamics of learning interactions contextually; third, there has been no research that comprehensively analyzes how PBL can simultaneously integrate the development of learning motivation, intellectual intelligence (IQ), and emotional intelligence (EQ) through a qualitative approach that can reveal the meaning and learning process holistically. Therefore, this study offers novelty by adopting a qualitative case study approach that not only measures the effectiveness of PBL but also provides an in-depth description of how the PBL implementation process unfolds and how the interactions in the learning process simultaneously impact the three fundamental aspects of learning motivation, IQ, and EQ in the context of Social Studies learning at SDN 034 Tarai Bangun. This provides a more complete and contextual perspective on the transformative potential of PBL at the elementary school level.

Based on this urgency, this study focuses on an in-depth analysis of the implementation of PBL in Social Studies learning for Grade IV and its impact on improving Learning Motivation, Intellectual Intelligence (IQ), and Emotional Intelligence (EQ) of students at SDN 034 Tarai Bangun. This study uses a qualitative case-study approach to holistically and contextually describe how the PBL process unfolds and how teacher-student and student-to-

student interactions influence the development of both aspects of intelligence. (Creswell & Creswell, 2022). With this in-depth focus, the study is expected to provide substantive findings regarding the potential of PBL as a transformative learning model in elementary schools. (Wibowo & Handayani, 2024).

LITERATURE REVIEW

Problem-Based Learning (PBL)

Problem-Based Learning (PBL) is a pedagogical model that uses authentic, unstructured real-world problems as catalysts for learning. (Arends, 2018). Philosophically, PBL is deeply rooted in constructivist theory, which emphasizes that knowledge is actively constructed by students through experience and interaction, rather than being passively received. (Nurhadi, 2021). In the context of Social Studies learning, this approach allows students to construct their understanding of social issues in a relevant way, challenging them to investigate and find solutions, thus moving the learning process away from mere factual memorization. (Agustina & Wijaya, 2023).

The implementation of PBL is guided by a straightforward syntax, generally consisting of five phases: orienting students to the problem, organizing students for learning, guiding individual and group inquiry, developing and presenting results, and analyzing and evaluating the problem-solving process. (Arends, 2018). In Grade IV Social Studies learning, the problems chosen must be relevant to social themes, such as local environmental issues or community problems, in order to stimulate students' curiosity and sense of social responsibility. (D. Hartono & Pratiwi, 2021). The success of PBL implementation heavily depends on the teacher's ability to present motivating problems and guide students through the inquiry process without providing direct solutions.

PBL is widely recognized for its effectiveness in developing 21st-century skills, particularly critical thinking and collaboration abilities. When faced with complex problems, students are forced to analyze various sources of information, evaluate their validity, and synthesize innovative solutions, which are key indicators of well-developed Intellectual Intelligence (IQ) (Wibowo & Handayani, 2024). Furthermore, this model teaches students about the learning process itself (metacognition), allowing them to reflect on strategies that worked and those that did not, thereby enhancing their learning autonomy (Sanrock, 2018). Although

effective, implementing PBL with Grade IV elementary school students presents its own challenges, particularly regarding their attention span and level of independence. These challenges require adaptations, such as selecting simplified problems and providing more intensive scaffolding during the initial phases of inquiry. Teachers need to ensure that each group can divide tasks fairly and maintain focus on problem-solving (Agustina & Wijaya, 2023). Proper adaptation will ensure that PBL remains a motivating experience and does not overwhelm students, thereby achieving the goals of enhancing motivation and intelligence.

Learning Motivation

Learning motivation is the driving force that influences the direction and intensity of students' learning behavior. In general, motivation is divided into two types: intrinsic, which comes from the enjoyment or internal interest in the activity itself, and extrinsic, which is driven by rewards, punishments, or external recognition. (Goleman, 2020). In the context of education, the primary focus is to foster intrinsic motivation, as this type of motivation is strongly correlated with persistence, deeper understanding, and better long-term learning outcomes. (D. Hartono & Pratiwi, 2021). The level of student motivation directly affects the extent to which they are cognitively engaged in the subject matter. Motivated students tend to use more complex learning strategies, such as elaboration and information organization, compared to students who are only extrinsically motivated. In Social Studies learning, which requires understanding abstract concepts, motivation becomes key to ensuring that students are willing to make the cognitive effort needed to analyze social problems and explore various solutions. (Wibowo & Handayani, 2024).

PBL is highly effective in promoting intrinsic motivation for three main reasons: the relevance of real-world problems, student autonomy in managing the inquiry, and the intellectual challenges it offers. When students see that what they are learning has direct implications for their world (relevance), they feel more empowered and motivated to find out (Agustina & Wijaya, 2023). Success in solving initially complex problems also boosts self-efficacy (belief in one's abilities), an important component of intrinsic motivation (Nurhadi, 2021). In qualitative research, increases in learning motivation are not measured numerically but observed in behavior and analyzed in student narratives. Indicators of increased motivation include increased initiative (asking questions, seeking additional resources), persistence (not giving up easily when facing challenges), enthusiasm (active participation in group discussions),

and positive student statements about Social Studies and the PBL model. This qualitative data provides a deeper understanding of how the PBL experience changes students' perceptions of the learning process (Creswell & Creswell, 2022).

Intellectual Intelligence (IQ)

Intellectual Intelligence (IQ) refers to a person's cognitive capacity to learn, reason, solve problems, and think abstractly. (Santrock, 2018). In the context of education, IQ is often measured by critical thinking, logical understanding, and inductive-deductive reasoning. In Social Studies learning, the development of IQ focuses on students' ability to analyze the root causes of social issues, evaluate various perspectives, and formulate rational solutions. Improving IQ is crucial to ensure that students can process complex information rather than memorize historical or geographical facts.

Problem-Based Learning (PBL) is often viewed as an approach that strengthens students' intellectual capacity because it demands analytical skills from the very beginning of learning. When students are confronted with unstructured problems, they must interpret complex conditions and identify the key aspects to address. This process stimulates higher-order thinking skills and helps students build a more mature intellectual foundation. (Haryanto & Malik, 2022).

The Problem-Based Learning (PBL) model serves as an ideal platform for developing EQ because it places students in intensive collaboration to solve authentic problems. (Setyawan & Suryani, 2022). Through the collaborative process, students are required to apply effective communication and active listening, and to provide appropriate responses to differing opinions. (S. Hartono & Ningsih, 2024). This learning situation also encourages the emergence of empathy and self-regulation when students face challenges, minor conflicts, or time pressure in completing tasks. (Wijaya, 2022). The measurement of EQ development in this study was conducted through in-depth observation of group interactions during PBL implementation. (Mahendra & Lestari, 2022). The indicators observed include the clarity of interpersonal communication, students' ability to resolve conflicts constructively, and their consistency in showing empathy towards other group members facing difficulties. (Sari & Damanik, 2023). The qualitative observation approach provides a rich depiction of students' emotional dynamics that numerical data cannot capture but are crucial to assessing the effectiveness of their collaboration. (Pratiwi, 2024).

METHODOLOGY

This study uses a qualitative case study design to comprehensively describe the implementation of PBL and its impact on the learning motivation, IQ, and EQ of Grade IV students at SDN 034 Tarai Bangun, focusing on the topic of Social and Cultural Diversity and Interpersonal Relations. This approach was chosen because it allows the researcher to understand the process, the dynamics of interactions, and the meaning constructed by students and teachers in the context of naturally occurring learning. The research location focuses on SDN 034 Tarai Bangun, with purposively selected research participants, including the Grade IV Social Studies teacher and student groups directly involved in PBL activities. (Anggraini & Putra, 2023). In the research process, the researcher acts as the primary instrument, observing, interpreting, and constructing field information in depth. (Rahmawati & Yuliana, 2021).

Data in this study were collected through three main techniques that complement each other as part of a methodological triangulation to ensure the validity of the findings: participatory observation (directly observing the PBL process), in-depth interviews with teachers and students (regarding their perceptions and experiences), and documentation (analysis of lesson plans and student work results). Data analysis was conducted following the interactive model of Miles, Huberman, and Saldana, which consists of three concurrent activities: data condensation, data display, and conclusion drawing/verification. (Creswell, 2018). The validity of the data is further ensured through source triangulation (comparing information from teachers, students, and documents) and peer debriefing, thereby lending high credibility to the researcher's interpretations. (Setyawan & Suryani, 2022).

The following are the stages of implementing the Problem-Based Learning process.

Phase/Stage	Description of Teacher Activities	Description of Student Activities
1. Orientation of Students to the Problem	The teacher presents a real (authentic) problem that is interesting and relevant to the Social Studies material. The teacher motivates students to engage in problem-solving.	Students observe and analyze the problem presented by the teacher. Students absorb the learning objectives to be achieved through solving the problem.
2. Organizing Students for Learning	The teacher helps students define and organize learning tasks related to the problem. The teacher ensures that each student understands their	Students discuss the problem, clarify relevant concepts, and divide tasks to gather the necessary information. Students plan problem-solving strategies.

	role and responsibilities within the group.	
3. Guiding Individual and Group Inquiry	The teacher facilitates and monitors students' data collection, experiment (if relevant), conduct, and the search for necessary sources to solve the problem. The teacher encourages student initiative.	Students actively search for and gather information from various sources (books, the internet, and interviews) to obtain reliable data to solve the problem.
4. Developing and Presenting Results	The teacher helps students plan and prepare reports, presentations, or models of the problem-solving results they have found.	Students analyze the collected data, organize their findings into a work (e.g., reports, posters, or presentations), and prepare to present it to the class.
5. Analyzing and Evaluating the Problem-Solving Process	The teacher encourages students to reflect on and evaluate their inquiry and the processes they used. The teacher provides feedback and assesses the learning outcomes.	Students reflect on the entire process they have gone through, evaluate the effectiveness of the problem-solving methods they used, and conclude new learning.

RESULT AND DISCUSSION

Result

The implementation of the Problem-Based Learning (PBL) model in Social Studies for Grade IV students at SDN 034 Tarai Bangun was conducted over three learning cycles, each focusing on authentic social topics, such as "The Impact of Economic Activities on the Environment." The implementation stages followed the standard PBL syntax, starting with the teacher's orientation of students to the problem, group formation, and culminating in the presentation of final solutions. Observation data showed that, in the initial cycle, students still required intensive guidance (scaffolding) from the teacher, especially during the problem-definition phase. However, in the third cycle, there was a significant improvement in students' independence, indicating that the PBL model had been successfully internalized as a problem-solving framework. The implementation of PBL demonstrated strong effectiveness in increasing student learning motivation, based on findings from interviews and field observations. This motivation increased because the problems given to students had direct relevance to their life experiences, triggering intrinsic learning motivation. Many students reported feeling more valued and challenged when their opinions were used to develop solutions in the group. Qualitative evidence of this was observed in students' increased confidence in

asking questions, their persistence in seeking additional information, and greater enthusiasm during group discussions.

Another key aspect that strengthens students' learning motivation is the provision of autonomy in problem-based learning, which allows students to manage their own inquiry process from planning to evaluating results. This autonomy creates space for students to choose the approaches, strategies, and data sources they believe are most effective, making them feel personally engaged in their learning. In the context of group learning, students also demonstrated improved collaboration skills by dividing tasks according to their individual interests and competencies, which in turn fostered a sense of responsibility and ownership of the learning process. The success of students in solving relatively complex problems further strengthens their self-efficacy, or belief in their ability to complete learning tasks, thus triggering greater effort in subsequent sessions. This pattern aligns with research findings that state intrinsic motivation develops optimally when individuals feel competent, have autonomy, and experience meaningful success in the learning process.

The development of Intellectual Intelligence (IQ), particularly in critical thinking and analytical skills, became prominent during the investigation and report preparation phases of the PBL model, when students had to process information independently and systematically. At this stage, students are no longer passive recipients of information but transform into active investigators who question the relevance of data, compare information from various sources, and verify the accuracy of findings before drawing tentative conclusions. These activities strengthen their ability to identify assumptions, assess the credibility of data, and formulate logical connections between evidence and the arguments they construct. Content analysis of student work documents also shows a significant improvement in the use of more logical and representative evidence to support opinions, reflecting a more systematic thought process that is no longer based solely on personal opinion. This more coherent argument structure marks a shift from basic analytical skills to advanced analytical abilities, which is one indicator of PBL's success in developing students' intellectual intelligence comprehensively.

Students' problem-solving abilities are tested and developed through the stages of PBL, which require them to identify the core issues before determining the appropriate solutions. The problems presented are initially ill-structured, so students need to reframe them as more operational tasks that can be solved. The process of formulating hypotheses, testing

assumptions, and synthesizing the final solution becomes an intensive cognitive exercise that strengthens higher-order thinking skills. The improvement in the quality of solutions presented in later cycles indicates that PBL fosters a systematic and logical mindset, a competency central to the development of intellectual intelligence (IQ). PBL has proven to be an effective platform for developing Emotional Intelligence (EQ), particularly in the social skills dimension. Observations of group interactions show that students learn to communicate assertively, listen actively, and negotiate to reach a consensus. Collaboration skills, which were initially rigid and often marked by miscommunication, gradually transformed into synergistic and supportive teamwork in the third cycle, reflecting an increase in social maturity.

In addition to social skills, PBL also trains aspects of emotional regulation and empathy. Conflict situations that arise during group work (e.g., disagreements or inactive members) force students to manage frustration and find constructive ways to address interpersonal issues. The ability to understand peers' difficulties (empathy) and offer support rather than blame is a significant indicator of EQ development. This process affirms that PBL focuses not only on cognitive outcomes but also on the formation of character and students' socio-emotional abilities in depth. A key finding of this study is that PBL functions as an effective integrative learning model that simultaneously links the development of Learning Motivation, IQ, and EQ. The increase in student motivation stems from the challenges of PBL, which stimulate intrinsic curiosity. This curiosity then drives greater cognitive effort, increasing IQ (critical thinking). The improvement in IQ and engagement takes place in a collaborative environment, which automatically triggers and trains EQ skills (communication and emotional regulation). Thus, the success of PBL at SDN 034 Tarai Bangun lies in its ability to create a holistic learning environment.

Discussion

The findings of this study are strongly supported by empirical evidence from recent studies confirming the effectiveness of Problem-Based Learning in elementary education in Indonesia. Sa'diyah et al. (2024), through a meta-analysis of 25 research articles, demonstrated that implementing the PBL model significantly and strongly impacts the critical thinking skills of elementary school students. This aligns with the findings of this study, which show that the investigation and report preparation phases in PBL strengthen students' analytical and systematic thinking at SDN 034 Tarai Bangun. The consistency of these results indicates that

PBL has strong pedagogical validity in developing high-level cognitive competencies, not only in the local context but also nationally. Furthermore, Azkia et al. (2025) It has been demonstrated through classroom action research that the implementation of PBL assisted by audiovisual media in Social Studies learning successfully improved students' critical thinking skills progressively from 35% to 85.7%, a pattern of improvement that parallels the findings of this study, where students' independence in defining and solving problems showed a significant acceleration from the first to the third cycle.

The dimension of emotional intelligence that emerged as an important finding in this study is also confirmed by studies. Setiawati et al. (2024) Studies show that integrating PBL with socio-emotional skills can enhance students' multidimensional engagement, including emotional activity, which increased from 58% to 79%. This pattern aligns with the study's observations of the development of emotional regulation and empathy among students during group work. These findings strengthen the argument that PBL is not just a cognitive strategy, but a holistic platform that simultaneously integrates the development of affective and social aspects. Praja & Andriani (2025) It adds a perspective on the importance of optimizing interactive multimedia in PBL, which achieved a feasibility level of 95% and high effectiveness with an N-Gain score of 0.7350, indicating that the success of PBL can be enhanced through the adaptation of contextual learning technologies. This implication is relevant for the future development of PBL at SDN 034 Tarai Bangun.

The contribution of PBL to improving Social Studies learning outcomes is also confirmed by the study of Maryam et al. (2024), which reported an increase in average learning outcomes from 67.75 to 82.61 through a local wisdom-based PBL, showing that the contextual relevance of the problems presented, as found in this study, is a crucial factor in stimulating intrinsic motivation and academic achievement. Fa'iqoh et al. (2025) used a quasi-experimental design to demonstrate that students who participated in PBL-based learning exhibited superior creativity and problem-solving skills compared to the control group, confirming that PBL is consistently effective in developing 21st-century competencies, including critical thinking, creativity, and collaboration. The convergence of findings from various research contexts strengthens the external validity of the study at SDN 034 Tarai Bangun. It confirms that PBL is a transformative pedagogical strategy for holistically integrating the development of learning

motivation, intellectual intelligence, and emotional intelligence in Social Studies learning at the elementary school level.

The results of this study reinforce the theoretical framework that PBL is not just a teaching method but also an instrument for developing multiple intelligences (IQ and EQ) at the elementary school level. Practically, these findings provide clear guidance for Social Studies teachers at the school to continue implementing and modifying PBL, particularly in selecting contextual problems and providing appropriate scaffolding. It is hoped that other schools can adapt this model to improve the quality of Social Studies learning by developing critical students with well-rounded emotional intelligence.

CONCLUSION

Based on the results of qualitative research with a case study design at SDN 034 Tarai Bangun, it can be concluded that the implementation of the Problem-Based Learning (PBL) model in Social Studies learning has proven to be a practical, integrative, and holistic approach. The implementation of PBL followed a five-phase syntax, initially requiring intensive scaffolding but progressively fostering student independence, as evidenced by improved problem definition and problem-solving. Three key findings demonstrate the effectiveness of PBL: First, there was a significant increase in student Learning Motivation, driven by the relevance of authentic problems and the autonomy provided in the inquiry process. Second, students' Intellectual Intelligence (IQ) developed through improved critical thinking and analytical skills, as seen in the quality of the solutions and arguments they presented. Third, students' Emotional Intelligence (EQ) was sharpened by the demands of collaboration, which trained social skills, empathy, and emotional regulation in the face of group conflicts. In short, PBL successfully created a Social Studies learning environment that not only focuses on cognitive transfer but also on character development and multiple intelligences in Grade IV students.

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