Journal of Social Studies and Education
Vol. 03 No. 02 (2025): 101-114
Available online at https://serambi.org/index.php/jsse

From Classroom to Community: Strengthening Economic Understanding through Problem-Based Learning

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Keywords:
Problem-Based Learning, Local Economy, Economic Literacy, Social Studies Learning
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ABSTRACT

This study aims to analyze the effectiveness of the *Problem-Based Learning* (PBL) model in improving students' understanding of local economic potential. Using a qualitative approach with the *Classroom Action Research* (CAR) method, the study was conducted through four stages: planning, implementation, observation, and reflection. The participants consisted of eighth-grade students enrolled in Social Studies (IPS) subjects. Data were collected through observation, interviews, pre- and post-tests, and student response questionnaires regarding the implementation of PBL. The findings indicate that PBL significantly enhanced students' critical, collaborative, and analytical thinking skills in understanding local economic dynamics. The increase in average scores from pre-test to post-test demonstrates a measurable improvement in students' conceptual mastery. Furthermore, students' active involvement in creating a local economic map strengthened their ability to connect theoretical knowledge with real-life economic practices in their surroundings. This study concludes that implementing PBL in social studies effectively promotes contextual economic literacy and fosters socio-economic awareness among junior high school students.

Article History:
Received: July, 2025; Revised: August, 2025; Accepted: October, 2025;
Available online: October, 2025

Please cite this article in APA style as:
Sa'i, M., Nugroho, P. A., & Zaini, A. W. (2025). From classroom to community: Strengthening economic understanding through problem-based learning. *Journal of Social Studies and Education*, *3*(2), 101–114.

INTRODUCTION

Problem-Based Learning (PBL) has emerged as an innovative pedagogical model that enables students to construct knowledge through investigation and reflection (Carrió Llach & Llerena Bastida, 2023; Smith et al., 2022; Tacap, 2022). Rooted in the constructivist paradigm, PBL emphasizes student-centered inquiry in which learning occurs through authentic problem-solving experiences (AlAli, 2024; Arega & Hunde, 2025; Zhang et al., 2022). Unlike traditional methods focused on memorization, PBL positions learners as active participants who collaborate, question, and analyze real-world issues. This approach aligns with

current educational demands that value creativity, critical thinking, and adaptability. In the context of social studies (*Social Sciences*, IPS) education, these competencies are particularly relevant, as the subject aims to deepen students' understanding of social and economic life. However, many students still struggle to connect economic theories with real-world practices in their communities (Khalil, 2025; Kubota, 2023; Smeplass, 2025). Integrating PBL into economic learning offers students opportunities to engage in direct observation, data collection, and analysis of their local economic environment.

Several studies have demonstrated that PBL effectively improves students' comprehension and engagement. Nicolaou et al. (2024) found that students involved in PBL-based instruction achieved higher understanding and collaboration skills. Prayogi & Ash'ari (2021) emphasized that PBL cultivates independent learning and critical reasoning by exploring real-world problems. In Indonesia, Megawati (2024) PBL enhances students' ability to apply economic concepts to everyday life, transforming abstract theory into practical knowledge. Similarly, Marthaliakirana (2022) observed that PBL strengthens students' communication and argumentation skills in economic learning. Despite these benefits, most existing studies emphasize conceptual understanding or classroom performance, with limited exploration of how PBL fosters *Local Economic Literacy*. Few have examined how PBL can help students identify and analyze economic potentials in their immediate surroundings, leaving an important area for qualitative inquiry.

While PBL has proven effective in developing critical and collaborative learning, its implementation in exploring local economic contexts remains underdeveloped. Economic learning in schools often emphasizes theory and textbook-based examples, limiting students' understanding of their socio-economic environment. This disconnection prevents them from recognizing how economic principles operate in their communities. Many students can describe market concepts but struggle to relate them to local enterprises, livelihoods, or trade systems. Teachers also face challenges in designing contextual problems that integrate school-based learning with community realities. Consequently, there is little empirical evidence on how PBL can bridge economic theory and local realities in a meaningful and measurable way. Addressing this gap is crucial to transforming economic education into an interactive, inquiry-driven process that fosters both intellectual and social relevance.

This study makes a novel contribution by applying PBL to explore the local economic potential surrounding SMP Ihyaussalafiyah Surabaya. Unlike previous research that primarily focuses on learning outcomes, this study emphasizes contextual understanding by linking classroom instruction with

community-based economic activities. Through PBL, students are guided to observe, collect data, and construct a local economic map—transforming theoretical knowledge into a tangible representation of their analytical thinking. The study introduces a dual innovation: pedagogically, it enhances the use of PBL as a framework for contextual learning; socially, it promotes students' awareness of local economic structures. This integration of active learning with community-based inquiry situates the study at the intersection of education and local development. By exploring this synergy, the research contributes to pedagogical innovation and the development of students' socio-economic competencies.

Accordingly, this study aims to examine how PBL improves students' understanding of local economic potential through contextual and participatory learning. Using a *Classroom Action Research* (CAR) framework, the research focuses on eighth-grade students at SMP Ihyaussalafiyah Surabaya who identify, analyze, and map economic activities around their school. The study investigates how iterative cycles of planning, implementation, observation, and reflection enhance students' comprehension, collaboration, and problem-solving skills. The goal is to reveal how PBL enables students to connect academic content with real economic contexts, fostering both critical awareness and practical insight. Furthermore, the study aims to provide a practical model for teachers to implement contextual learning effectively in social studies education. Ultimately, this research contributes to improving the relevance of economic education by making learning more experiential, reflective, and grounded in students' lived realities.

METHOD

This research uses a qualitative design with a Classroom Action Research (CAR) approach, aiming to improve students' understanding of local economic potential through the application of *Problem-Based Learning* (Ceylan & Comoglu, 2024; Dolapcioglu, 2025; Help et al., 2022). The classroom action design was chosen because it integrates theory and learning practice directly in the classroom and allows teachers to make continuous improvements to the learning process. The research was conducted at Ihyaussalafiyah Junior High School in Surabaya, involving social studies teachers and grade VIII students as the main subjects. This context is relevant because schools have socio-economic characteristics that reflect the dynamics of urban communities, making them suitable for exploring the application of PBL to understand local economic potential. The qualitative approach is used because it provides a space for researchers to understand students' learning experiences in depth through observation, interviews, and

reflections integrated into each action cycle (Carter et al., 2021; Ellis & Hart, 2023; Folkes, 2023). This approach also allows for narrative interpretation of data to highlight changes in behavior, engagement, and improved students' critical thinking abilities.

Data were collected through multiple techniques to ensure comprehensive findings. Observation was used to record students' engagement and collaboration during learning activities. Pre-tests and post-tests were administered to measure the improvement in conceptual understanding of local economic potential. In addition, interviews and questionnaires were conducted to gather students' feedback and perceptions regarding the use of the PBL model. The study involved 30 eighth-grade students of SMP Ihyaussalafiyah Surabaya, selected through purposive sampling based on their participation level and ability to engage in group projects. The diversity of students' academic backgrounds and interests was also considered to obtain a more complete picture of PBL's effectiveness in the social studies context. Data credibility was ensured through triangulation of observation, test, and interview results, supported by reflective discussions with the classroom teacher after each cycle (Azman et al., 2025; Bellido-García et al., 2022; Kavanagh et al., 2024).

The data analysis employed two complementary approaches. Quantitative analysis was conducted using descriptive statistical tests to compare students' learning outcomes before and after the implementation of the Problem-Based Learning (PBL) model (Bennett et al., 2023; Hendren et al., 2023; Rasoolimanesh et al., 2021). Qualitative analysis used thematic analysis to identify recurring patterns in student engagement, challenges, and learning improvements observed throughout the implementation process (Braun & Clarke, 2023, 2024; Naeem et al., 2023). By integrating these two approaches, the study offers empirical evidence of how the PBL model enhances students' understanding of local economic potential in the context of SMP Ihyaussalafiyah Surabaya. To illustrate the iterative process of the Classroom Action Research (CAR) implemented in this study, the research flow is presented in Figure 1.

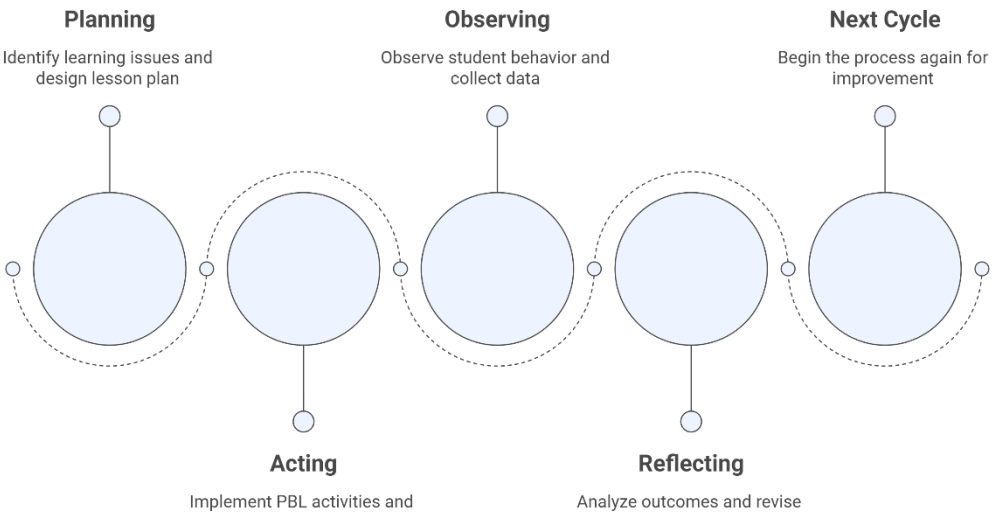

Figure 1. Research Flow of Classroom Action Research (CAR)

RESULT AND DISCUSSION

Result

This class-action research was conducted in grade VIII at Ihyaussalafiyah Junior High School, Surabaya, over three learning cycles in the Social Sciences (IPS) subject. The purpose of this research is to increase students' understanding of the potential of the local economy by applying the Problem-Based Learning (PBL) model. Each cycle consists of four main stages, namely planning, implementation, observation, and reflection. The study involved 30 students with diverse academic abilities, including high, medium, and low. The learning process focuses on implementing real, problem-based activities across the school, especially the local community's economic activities. Through the PBL approach, students are directed to analyze field data, engage in group discussions, and produce learning products in the form of local economic maps that illustrate the distribution of business types in the school environment.

Results of Cycle I

The implementation of actions in cycle I focuses on introducing the basic concept of local economic potential and on initial training in applying the PBL model. Teachers guide students to identify different types of businesses around the school through simple observation activities. Students are divided into small groups to record the economic data they find, such as stalls, shops, street vendors, and service providers. Based on the field observations, the types of businesses found in the school environment are presented in Table 1.

Table 1. Types of Businesses Around Ihyaussalafiyah Junior High School Surabaya

Yes	Type of Trader	Sum
1	Grocery Store	2
2	Public Toilet	1
3	Rice Stall	3
4	Meatball Vendor	1
5	Thieving Vendors	1
6	Toy Vendor	2
7	Scrap Metal Store	2
8	Chicken Satay Stall	1
9	Martabak and Terang Moon Vendor	1
10	Siomay Vendor	1

11	Fruit Vendor	1

Based on Table 1, the data shows that culinary businesses are the most dominant type of business around schools. The dominance of the food and daily needs sector indicates that the community around the school is more focused on basic needs. The observation results showed that the student participation rate in the first cycle reached 65%, with an average learning outcome score of 68 and classical completeness of 70%. The main obstacle at this stage is students' limited ability to relate economic theory to real phenomena, as well as difficulties in compiling observation reports. The reflection of the first cycle shows the need for improvement, specifically, more intensive guidance on the collection and classification of local economic data.

Results of Cycle II

Improvement actions in cycle II focus on analytical skills and preparing local economic maps. The teacher added a training session on interview techniques and on organizing observation data. Students are guided to group data by business type and economic sector. Learning activities were carried out collaboratively through group discussions and presentations of initial findings. The distribution of the types of businesses students have successfully identified is presented in Figure 2.

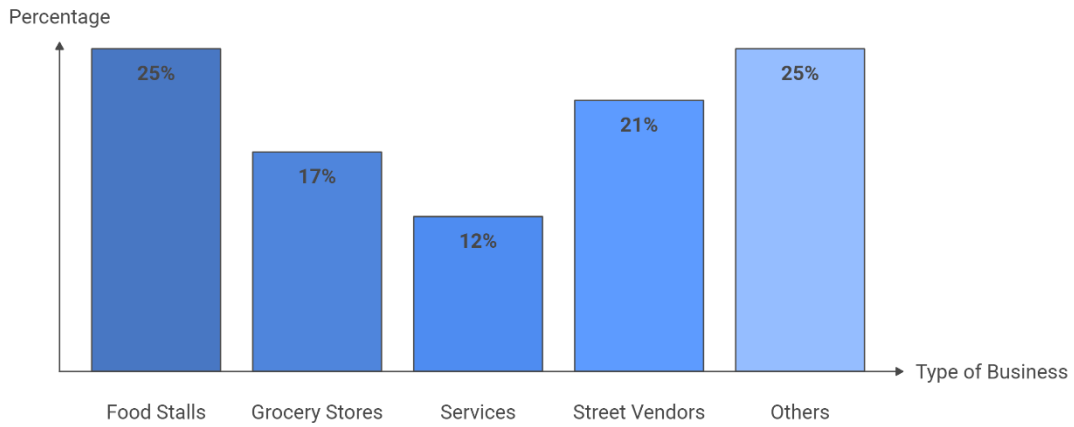

Figure 2. Distribution of Business Types by Category

Based on Figure 2, the culinary sector and trade in necessities dominate

economic activity around schools. This distribution pattern corresponds to *Central Place Theory*, which posits that small economic centers form around the demand for people's daily needs (Favero et al., 2022; Zhao et al., 2025). The results of the observation showed an increase in student participation to 88%, with an increase in the average learning outcome score to 82.7. Collaborative activities among students have also increased significantly, as they began to actively discuss, ask questions, and relate the results of their observations to the economic theories they studied. However, some students still have difficulty visualizing data in an economic map format, so the aspect of presenting results becomes the focus for improvement in the next cycle. This data reinforces the findings that PBL helps students connect theory with real economic phenomena, making the learning process more meaningful.

Cycle III Results and Reflections

Reflections from cycle II show that most indicators of success have been achieved, but there is room for improvement in students' ability to interpret and present data visually. Therefore, in cycle III, teachers provide additional training on the preparation of digital-based economic maps and strengthen the presentation session for project results. Students began using simple tools such as Canva and Google Maps to display observation results as interactive maps.

The observation results showed an increase in student activity of up to 92%, with an average learning outcome score of 86, and a learning completeness rate of 100%. Students demonstrate greater ability to explain the relationships among business locations, consumer demand, and local market dynamics. The resulting economic map has also become more systematic, showing the distribution of business types by category and distance from schools. The teacher noted that this activity not only improved students' economic understanding but also developed their communication, cooperation, and critical thinking skills. To illustrate the development of learning outcomes and student participation during the three research cycles, a summary of learning outcomes is presented in Table 2.

Table 2. Improvement of Learning Outcomes and Student Activity per Cycle

Cycle	Grade Point Average	Completeness (%)	Student Activeness (%)
I	68	70	65
II	82.7	95	88
III	86	100	92

Table 2 shows consistent improvements across all indicators of success. Student learning outcomes increased by 18 points from cycle I to cycle III. Student

activity increased by 27%, and learning completeness reached 100%. This proves that applying the PBL model repeatedly and reflexively across three action cycles has significantly increased student understanding and participation. This data strengthens the evidence that the repeated application of the Problem-Based Learning (PBL) model across three action cycles can improve students' understanding of economic concepts, learning motivation, and critical thinking skills.

Quantitative Analysis

Quantitative analysis was conducted to assess improvements in student learning outcomes from pre-test to post-test using *a paired t-test*. The calculation results showed a *t-count* value of 8.92 with *a t-table* at a significance level of 0.05 of 2.045. Because *t-count* > *t-table* is a significant difference between the values before and after the application of the PBL model. Descriptively, the average student score increased from 65.4 to 82.7, while the standard deviation decreased from 7.8 to 6.2. This shows that the increase in students' understanding of local economic concepts is not only statistically significant but also academically consistent. In addition, the questionnaire results showed that 90% of students felt more motivated to learn, 85% felt more actively participating, and 78% felt more able to connect economic theory with the social reality around them. To clarify the comparison of pre- and post-learning scores, a summary of the statistical test results is presented in Table 3.

Table 3. Results of Quantitative Analysis Pre and Post Implementation of PBL

Data Type	Average Score	Standard Deviation	T-Count	t-table (α = 0.05)	Information
Pre-Test	65,4	7,8			
Post-Test	82,7	6,2	8,92	2,045	Significant

Remarks: ***t-count > t-table → There is a significant difference between the values before and after the application of PBL.***

Based on Table 3, the average student score increased by 17.3 points, with the standard deviation decreasing from 7.8 to 6.2. This shows an increase in understanding that is not only statistically significant but also academically consistent. In addition, the questionnaire results reinforce these quantitative findings. As many as 90% of students feel more motivated to learn, 85% feel more actively participating in discussions, and 78% find it easier to connect economic theory with real-world conditions. This data confirms that implementing PBL not only improves cognitive learning outcomes but also positively impacts student motivation, participation, and involvement in the learning process.

Qualitative Analysis

Qualitatively, the results of observations and interviews show positive changes in learning behavior. At the beginning of the study, most students were still passive, waiting for the teacher's direction. However, in the second and third cycles, students began to show initiative in discussing, conducting independent observations, and critically analyzing field data. The learning process becomes more dynamic and participatory, allowing students to convey ideas based on real observations. Teachers also noted improvements in students' reflective ability in relating economic concepts to economic activities around the school, such as the interaction between traders and consumers, the influence of location on prices, and the role of demand and supply in determining local economic activity. The application of PBL has been proven to help students develop critical, collaborative, and communicative thinking skills, as stated by Hmelo-Silver (2022) and Savery (2015).

Discussion

The study found that applying the Problem-Based Learning (PBL) model can enhance students' understanding of the local economic potential in the area around Ihyaussalafiyah Junior High School, Surabaya. This increase is evident in the average pre-test score rising from 65.4 to 82.7 in the post-test, as well as in student activity rising from 65% in the first cycle to 92% in the third cycle. The findings reinforce the view that PBL is effective in developing critical, analytical, and collaborative thinking skills through real-world problem-based learning experiences.

Theoretically, the successful implementation of PBL aligns with the constructivist principle that positions students as active subjects in the construction of knowledge (O'Connor, 2022). Through observation, interviews, and field analysis, students not only understand economic concepts conceptually but also construct meaning through hands-on experience. This learning process aligns with Vygotsky's view of the zone of proximal development, in which social interaction and teacher guidance play important roles in fostering meaningful learning.

The results of this study are also consistent with those of Smith et al. (2022), who found that PBL can improve conceptual understanding, problem-solving skills, and student collaboration. In a local context, this study confirms the findings of Prayogi & Ash'ari (2021), who found that applying PBL in economic learning in secondary schools can improve students' ability to understand the relationship between economic theory and social phenomena in

their surrounding environment. By actively involving students in identifying local economic potential, learning activities become more relevant and contextual.

In addition to improving academic outcomes, the implementation of PBL also has a significant affective and social impact. Students become more motivated because learning activities are directly related to daily life. Local economic map preparation activities strengthen communication skills, cooperation, and responsibility in completing group tasks. This aligns with Khalil's (2025) findings that problem-based learning helps build an independent attitude and a sense of responsibility in the learning process.

From a pedagogical perspective, the success of PBL implementation is influenced by a systematic learning design and by teachers' support as facilitators. Teachers play an important role in designing relevant issues, directing discussions, and providing feedback during the reflection process. Without careful planning, PBL can cause confusion among students (Fischl, 2025; Lee, 2023; Patmasari et al., 2025). However, in this study, the repetitive and reflective structure of classroom actions ensures that the learning process unfolds in a directed and gradual manner, enabling students to understand the relationship between theory and practice continuously.

The application of PBL in social studies learning opens up opportunities for schools to strengthen the relationship between education and socio-economic realities in the surrounding environment. Through this approach, students not only learn economic theory but also understand its application in real life, including the distribution of businesses, people's consumption patterns, and the potential for local economic development. This activity fosters economic awareness from an early age and equips students with the critical and adaptive thinking skills needed to face global challenges.

Thus, the results of this study confirm that Problem-Based Learning is an effective learning strategy to improve students' local economic literacy. In addition to strengthening cognitive aspects, this model also develops affective and social dimensions, making learning more contextual, meaningful, and oriented toward 21st-century skill development. In the future, the application of PBL can be expanded through cross-subject collaboration, the use of digital media, and the integration of project-based activities that are directly related to the lives of the community around the school.

CONCLUSION

The implementation of the *Problem-Based Learning* (PBL) model in social studies at SMP Ihyaussalafiyah Surabaya proved effective in enhancing students' understanding of local economic potential. The findings indicated a steady

improvement across three learning cycles, with the average score increasing from 65.4 to 82.7 and learning mastery reaching 100%. Students exhibited greater engagement, critical thinking, and collaboration as they investigated real-world economic issues within their community. Through activities such as observing, analyzing, and mapping local businesses, they developed not only theoretical comprehension but also practical experience in applying economic concepts. The creation of a local economic map served as a tangible learning outcome, linking classroom theory to actual economic dynamics. This process also strengthened students' research, data analysis, communication, and teamwork skills—competencies essential for 21st-century learners.

Pedagogically, the success of PBL in this study underscores its value as an innovative approach that transforms students from passive recipients into active problem solvers. The model fosters contextual learning, reflective thinking, and social awareness by engaging students with authentic, community-based problems. Consequently, PBL can serve as a practical framework for teaching economics and other social sciences, cultivating analytical, creative, and socially responsible learners. Future studies are encouraged to expand the application of PBL by integrating digital learning media and interdisciplinary collaboration, thereby further enriching learning experiences and strengthening students' ability to apply economic reasoning in broader social contexts.

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