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INTEGRATING CONTEXTUAL TEACHING AND PROBLEM-BASED LEARNING TO ENHANCE STUDENTS' ECONOMICS LEARNING OUTCOMES: A CLASSROOM ACTION RESEARCH

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ABSTRACT

Phenomenon/Issue: Economics learning at SMAN 13 Surabaya still faces serious challenges in the form of a dominant teacher-centered lecture method, low student engagement in the learning process, and unsatisfactory cognitive learning outcomes for 11th-grade students. On the other hand, the Independent Curriculum demands the use of more contextual, creative, and student-centered learning methods.
Purpose: The purpose of this study is to improve economics learning practices and student learning outcomes through the iterative implementation of CTL integrated with PBL in a classroom action research process.
Novelty: The novelty of this study lies in examining how the contextualization mechanism of CTL and the problem-driven inquiry of PBL can be integrated systematically to improve economics learning practices through classroom action cycles.
Research Methods: The research applied in this study is classroom action research (CAR). CAR is a kind of study that enhances student learning outcomes in the classroom by utilizing a variety of learning development strategies.
Results: The research showed that teachers were able to implement this learning model effectively. Furthermore, student activity showed a descriptive increase from the first to the second cycle. These findings indicate that the CTL model integrated with PBL could be implemented progressively to support improvements in the economics learning process across classroom action cycles.
Research Contributions: The implementation of the learning model successfully increased student engagement during the learning process, received excellent responses from students, and improved their cognitive learning abilities in understanding material on monetary policy and fiscal policy.

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INTRODUCTION

Amidst the rapid development of a knowledge-based economy, education is a crucial tool for improving the quality of human resources and national competitiveness. Globally, students' literacy and numeracy skills are crucial indicators of the young generation's readiness to face the challenges of the 21st century. The Programme for International Student Assessment (PISA) report released by the Organisation for Economic Co-operation and Development (OECD) in December 2022 shows that Indonesian students' achievement remains far below the average for OECD countries. Specifically, Indonesia's reading literacy score in the 2022 PISA was 359, compared to the OECD average of 456; in mathematics, Indonesia scored only 366, compared to the OECD average of 453; and in science, Indonesia scored 383, compared to the OECD average of 476 (State 2022). This information indicates that there is still significant room for growth in Indonesian students' analytical, critical thinking, and real-world problem-solving skills, which still need significant improvement. Reading literacy scores in the 2022 PISA assessment even declined to the lowest level since Indonesia first participated. This situation emphasizes the urgency of shifting the educational paradigm beyond simply transferring knowledge to emphasizing the development of higher-order thinking skills (HOTS) (Loyens et al. 2023; Orhan 2024). The independent curriculum, a revolutionary policy that encourages student-centered learning by enabling educators to create contextual learning strategies, such as project-based and problem-solving approaches, was introduced by the government in response to this challenge through the Ministry of Education, Culture, Research, and Technology (Amiruddin et al. 2023; Hernández-Ramos et al. 2021; Salih and Omar 2022). The independent curriculum aligns with the global education movement, which places a strong emphasis on developing 21st-century skills such as communication, critical thinking, creativity, and teamwork. However, its implementation still faces challenges, particularly in the shift from teacher-centered to student-centered learning in various educational institutions.

Based on the observation results obtained by researchers at SMAN 13 Surabaya, information was obtained that the school has a total of 24 classes. For class X there are 7 classes with a total of 323 students, class XI has 10 classes with a total of 389 students, and class XII also has 10 classes with a total of 389 students. The following information shows that the minimum completion criteria (KKM) for economics is 80. However, the classical completion rate must reach ≥80%. The current learning conditions prove that the learning outcomes of class XI students in economics are still inconsistent. Class XI students are divided according to majors, Social Studies has three classes, namely XI 8, 9, and 10. Of the three classes, class XI-10, with 38 students, has the lowest learning outcomes compared to other classes in class XI economics, based on initial observations and analysis of grades received from subject teachers. This is evident in the final grade list for semester 1, where 36 students, or 95% of the total, scored below 80, requiring remedial classes. Meanwhile, 5%, or 2 students, met the minimum completion criteria. Until now, students still participate very little in the learning process and continue to struggle to understand the learning material, making it difficult for them to achieve optimal learning outcomes (Parkhouse et al. 2021; Toulia, Strogilos, and Avramidis 2023). High school economics plays a crucial role in developing students' analytical abilities with regard to socioeconomic phenomena and their capacity for making logical decisions in daily life. Concepts such as inflation, supply and demand mechanisms, fiscal and monetary policy, and employment issues require a contextual approach for students to understand them deeply. However, in reality, the lecture method still dominates economics instruction in many schools, resulting in minimal active participation during the learning process and insufficient training in critical economic analysis. A similar situation was found among 11th-grade students at SMAN 13 Surabaya, where students' cognitive learning outcomes tended to be low and their level of active participation in class discussions was still limited. This finding aligns with the statement (Nachtigall, Shaffer, and Rummel 2022; Situmorang, Panggabean, and Situmorang 2024; Souza et al. 2025) that instruction that does not relate the subject to real-world scenarios has an impact on low student motivation and learning outcomes. In the context of studying economics, students have increasing difficulty understanding abstract economic concepts when the information is not connected to the real world. This ultimately leads to a decline in their cognitive learning outcomes.

Economics learning at SMAN 13 Surabaya still faces serious challenges in the form of the dominance of teacher-centered lecture methods, low student active involvement in the learning process, and

unsatisfactory cognitive learning outcomes for grade XI students. On the other hand, the Independent Curriculum demands the use of more contextual, creative, and student-centered learning methods. Although the CTL and PBL models have each proven effective, studies on the application of their integration in the context of high school Economics learning are still very limited. Based on these classroom problems and the identified pedagogical gap, this study aims to examine how the integration of CTL and PBL can be implemented through classroom action cycles to improve economics learning practices and student learning outcomes among Grade XI students at SMAN 13 Surabaya.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Contextual Teaching and Learning (CTL)

Model is a relevant learning strategy for addressing these issues. CTL is a learning model that helps students develop understanding through direct experience, reflection, and social interaction while observing the relationship between the material and their real-world situations. Because it connects academic knowledge with relevant real-world experiences, (Nurhana and Abdullah 2021; Samsudin 2025) show that a contextual approach is beneficial in improving students' conceptual understanding and learning retention. (Budiman, Samani, and Setyawan 2021; Mahmuti, Hamzić, and Thaqi 2025) more specifically proves that the use of CTL on students' cognitive learning outcomes shows greater improvement compared to conventional learning methods. Contextual research conducted (Perales and Bedoya Ulla 2025; Tungka et al. 2023) also claims that using the CTL model in the classroom can enhance students' enthusiasm to learn and their communication skills in economics classes. However, for students to not only deepen topics contextually but also be able to evaluate and solve problems independently and in a structured manner, CTL must be combined with strategies that specifically encourage systematic problem-solving skills.

Problem-Based Learning (PBL)

Model is a student-centered approach to learning that starts with an issue. Students are guided to think critically, search for and process information, and find solutions based on learning objectives through assigned tasks (Nicolaou et al. 2024; Yang et al. 2023). According to (Xiong et al. 2025; Xue, Lu, and Liu 2025; Zheng et al. 2023), PBL is implemented into the curriculum and learning process through problem-solving design, which can motivate students to obtain important information, improve their problem-solving skills, create independent learning techniques, and work in groups. According to (Pimdee et al. 2024; Trullàs et al. 2022), PBL requires students to actively participate in finding, searching, and developing information both individually and in groups because applying a problem is the first step in gathering information and being able to integrate it with new knowledge. According to (Guo et al. 2024; Hu et al. 2025; Lu et al. 2022), it was specifically found that the implementation of PBL had a significant influence on learning. (Liubana et al. 2025) confirmed the results that the use of PBL improves economic learning outcomes compared to conventional learning. This shows that PBL is an educational approach that is able to improve learning outcomes while encouraging student participation in the process.

HYPOTHESES DEVELOPMENT

To create a more contextual and relevant economics learning experience, it is crucial to integrate PBL with CTL in an integrated learning design, as evidenced by the application of PBL documented in various literature. Research (Amiruddin et al. 2023; Liubana et al. 2025) confirms that although PBL has proven effective in the Independent Curriculum for Economics learning in high schools, challenges remain in changing learning paradigms, as well as limited facilities and access to technology that hinder its widespread implementation. Although previous studies have examined CTL and PBL separately, there remains insufficient pedagogical understanding of how the contextualization provided by CTL and the problem-driven inquiry promoted by PBL can be systematically integrated within classroom action cycles. In particular, limited attention has been given to how these two approaches can be coordinated through iterative planning, action, observation, and reflection to address students' difficulties in connecting economic concepts with real-life contexts and their limited engagement in problem-solving activities. Most previous research has focused on science, mathematics, or language

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subjects, while research quantitatively measuring improvements in cognitive learning outcomes through the integration of CTL and PBL in economics subjects in public high schools, particularly in Surabaya, is still rare. Furthermore, previous research tends to focus more on affective aspects such as motivation and learning attitudes, as well as critical thinking skills, while quantitative measurements of specific cognitive learning outcomes are less comprehensive. This pedagogical gap highlights the need for a more contextual understanding of how CTL and PBL can be integrated as an iterative classroom improvement strategy and how changes in student engagement and learning outcomes can be observed across action cycles. This study addresses this gap through a systematic classroom action research process in which changes in teacher implementation, student activity, and learning outcomes are observed and reflected upon across successive cycles.

Based on this explanation, This study has important theoretical and practical implications. Theoretically, it discusses a problem-based learning approach for economics in high school that combines contextual learning and real-world experiences. Practically, the findings are expected to provide new and creative teaching methods for Economics teachers, help schools enhance collaborative learning, and serve as a resource for future researchers conducting similar studies in various contexts, variables, and educational levels. The successful integration of CTL and PBL in improving students' cognitive learning outcomes can provide important empirical evidence supporting the more effective and meaningful implementation of the independent curriculum in public schools. Therefore, this research is highly relevant to the current national education policy goal of making economics teaching more contextual, participatory, and problem-solving-oriented.
Accordingly, the action focus of this study was to examine how the integration of CTL and PBL could be implemented, refined, and reflected upon across classroom action cycles, with attention to changes in student engagement and learning outcomes.

METHOD

Research Type

The research applied in this study is classroom action research (CAR). Classroom action research (CAR) is an iterative research approach aimed at improving classroom learning practices through cycles of planning, action, observation, and reflection. In this study, each cycle was used to identify learning difficulties, implement the planned CTL-integrated PBL actions, observe their implementation and student responses, and reflect on the results to inform subsequent actions.

Research Location and Subjects

This research took place at SMAN 13 Surabaya, located on Jalan Lidah Kulon, Lakarsantri, Lakarsantri District, Surabaya City, East Java. The subjects of the study were 11th-grade students in the 2025–2026 academic year. Each class consisted of 38 students, 14 boys and 24 girls.

Research Design

Several experts have created classroom action research models using various charts or diagrams. Action Planning, Research Action, Observation, and Reflection are the four main phases of CAR. The procedure for classroom action research is carried out in several phases known as cycles (Kemmis et al. 2014)

Research Data and Instruments

Teachers and students served as data sources for this study. Teachers' activities in guiding learning activities throughout the learning process are a necessary source of data. Meanwhile, student activities during the learning process are included in the student data. Affective evaluation is conducted through exercises that reveal the content of student communication and attitudes throughout the learning process.

Research Instruments

The research instruments used are as follows: The first instrument used to evaluate teacher activities during student learning is a teacher activity observation sheet. The second instrument used to evaluate

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student learning activities is a student activity observation sheet. Third, students are given a questionnaire to complete to identify challenges they face during learning. Fourth, each cycle includes a test sheet containing affective evaluation and a learning outcome test.

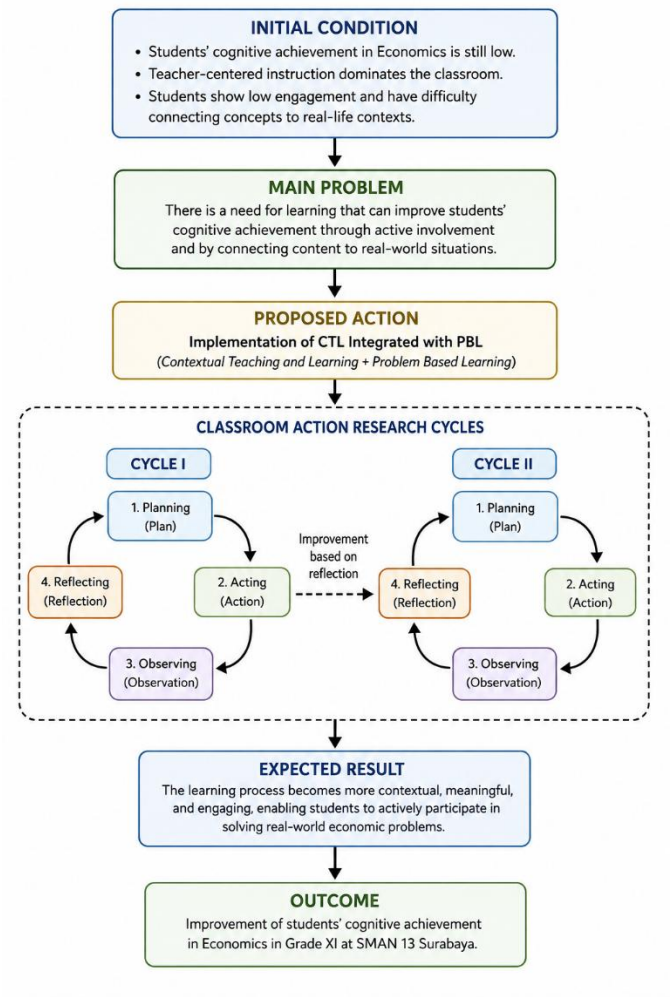

Figure 1 Conceptual framework diagram

Data Collection Techniques

The following is a brief explanation of the data collection methods:

1) To gather information on student learning outcomes, including assessment of the product and affective aspects of the CTL learning process integrated with PBL, this study examined student learning outcomes. The researcher supplied an assessment sheet to gauge students' attitudes and conduct during the learning process. The researcher used a pre-test and post-test, with questions covering the cognitive domain covering levels C4 to C5 in the product evaluation or testing model. The purpose of the post-test was to evaluate students' understanding and knowledge of the information provided after they completed the learning process using the integrated CTL and PBL approaches (Bergman et al. 2015). 2) Classroom teachers and colleagues conducted observations to collect research data through teacher and student activities during the learning process (Kijkuakul 2019). 3) A questionnaire approach was used, which involved asking students a series of questions after the learning process was completed to gather information about any challenges or obstacles they faced (Fook and Sidhu 2015).

Data Analysis Techniques

Descriptive quantitative analysis techniques were used to examine the collected data.

1. Analysis of Teacher and Student Activities

Teacher and student activities were studied using a descriptive quantitative analysis approach. The following criteria can be used to analyze student and teacher behaviors during the learning process:

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Table 1
Interval Score Analysis for Teacher and Student Activities

Interval Score	Criteria	Theory
1,00 – 1,75	Very low	(Watson Todd 2011)
1,76 – 2,50	Low	
2,51 – 3,25	High	
3,26 – 4,00	Very high	

2. Student Opinion Analysis

To ascertain the degree of student interest in implementing the learning model that combines integrated CTL with PBL, it is required to analyze student viewpoints. Student opinions are obtained through questionnaires completed by students. Student opinions can be analyzed and obtained using the following percentage formula:

$$P = \frac{F}{N} \times 100\%$$

Description:

P represents the percentage of respondents' responses, F represents the frequency or quantity of students' opinions, and N represents the total number of students who participated in the study as respondents.

Table 2
Interval Scores for Student Opinion Analysis

Interval Score	Criteria	Theory
0% - 20%	Very weak	(Manakul, Somabut, and Tuamsuk 2023)
21% - 40%	Weak	
41% - 60%	Fairly	
61% - 80%	Strong	
81% - 100%	Very strong	

3. Individual Completion

If a student's score reaches or exceeds the Minimum Competency (KKM) score of 80, as set by the school, they are considered to have achieved the learning requirements (individual completion). The following formula can be used to determine individual completion:

$$P = \frac{Scores\ obtained}{Maximum\ score}\ X\ 100\%$$

Description:

The maximum score is the highest score that can be achieved based on all observation indicators, P is the proportion of observation results, and the score obtained is the total of the observer's observation scores.

4. Classical Completion

According to the school's Minimum Competency (KKM) score of 80, a class is considered to have achieved classical completion if at least 80% of the students in the class have met the learning completion criteria.

$$P = \frac{\sum Students\ completed\ their\ studies.}{\sum Student}\ X\ 100\%$$

Description:

The percentage of learning completion is represented by P, the number of students who meet the Minimum Competency Criteria (KKM) is represented by Σ students, and the total number of students who are the subjects of the study is represented by Σ students.

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Table 3
Classical Completion interval score

Interval Score	Criteria	Theory
0% - 20%	Very weak	(Manakul, Somabut, and
21% - 40%	Weak	Tuamsuk 2023)
41% - 60%	Fairly	
61% - 80%	Strong	
81% - 100%	Very strong	

Learning Management Analysis

The CTL model integrated with PBL was used to examine how learning was implemented in the classroom using data collected from observation sheets completed by observers. Analysis was conducted by converting numerical values into descriptive quantitative remarks that assess the degree of execution using a scale.

Cognitive Learning Outcomes

Scores from the learning outcome assessments form cognitive learning outcome data. These questions must first be tested on a class group other than the one used in the research before being used as a research instrument. The 11th grade class used for the instrument pilot test has a diverse student body and is nearly identical to the research class. Furthermore, the 11th grade students had previously studied fiscal and monetary policy in their 11th grade subjects. This step was conducted to make sure the questions were valid, reliable, had an appropriate level of difficulty, and were able to differentiate between students' abilities.

Affective Learning Outcomes

Student performance is scored by observing and assessing each measured ability using a scoring scale of 1 to 4. An explanation of the meaning of the scores for each assessment aspect is provided in the assessment rubric.

Student Activity Analysis

A scale of 1 to 4 categories for each activity type can be used to examine observational findings acquired by observers while they were learning.

Student Questionnaire Data Analysis

The results of the questionnaire on the application of the CTL model combined with the PBL approach can be used for data analysis. The analysis of student responses used a checklist format, with assessments based on each criterion using a Likert scale of 1-4. The percentage of responses was then calculated for each question on the questionnaire.

Research Success

The success of the research in this study can be assessed using various measurements, as follows: 1) The learning outcomes in question are communication and reasoning skills, with the implementation of the CTL learning model integrated with PBL. The required results have met the classical learning completion rate of 80%. Students who have met the learning completion rate have scores exceeding the school's Minimum Competency, which is 80% or more. 2) The teacher's classroom management skills during the CTL integrated learning with the Problem-Based Learning method are categorized as very good, with a score of 3.26–4.00. 3) Student activity during the CTL integrated learning with the PBL method is categorized as very good, with a score of 3.26–4.00. 4) Student opinions during the CTL integrated learning with the Problem-Based Learning method are categorized as very strong, with a score of 81%–100%.

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Instrument Development

Validity

Question validity is necessary for researchers to assess the extent to which student learning outcomes achieve predetermined indicators or learning objectives using a questionnaire (Brown and Abdulnabi 2017). Forty of the 50 questions in the validity test, conducted using SPSS for Windows, had good validity, while the remaining 10 questions did not meet the validity criteria.

Reliability

After checking the validity of the data, the next step was to test its reliability (Nunnally and Bernstein 1994; Taber 2018). To test data reliability, the Cronbach's alpha value must be greater than 0.60 (DeVellis and Thorpe C. T. 2022). The Cronbach's alpha value of 0.826, which is greater than 0.60, was obtained from data analysis using the SPSS for Windows analysis program. The researcher deemed the instrument evaluated reliable and suitable for use in this study.

Difficulty Level

Based on the outcomes of experiments carried out with Microsoft Office Excel 2010 software, the data obtained showed that 7 questions were categorized as easy, 40 as medium, and 3 as difficult. Therefore, this study did not use questions with easy or very difficult levels, but rather questions with medium difficulty (Abdulghani et al. 2015). Thus, the researchers obtained a total of 40 questions that could be used by the researchers. Therefore, in this study, these 40 questions could be used in two cycles, with each cycle containing 20 questions.

RESULTS AND DISCUSSIONS

Teacher Activity Results

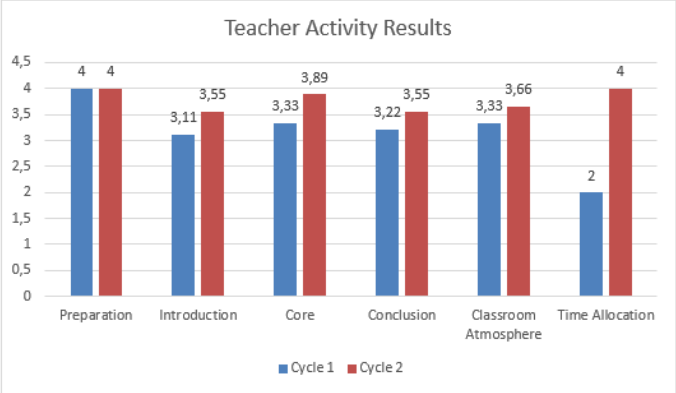

Figure 2 results of observations of teacher activities

Based on figure 2, it can be seen that teachers have implemented CTL learning management integrated with the PBL method well in every learning stage. The rise in scores in every learning management category makes this clear. In the preparation stage, the average score in the first cycle was included in the very good category and increased in the second cycle to the very good category. In the preliminary stage, the average score in the first meeting was included in the good category and then increased to the very good category in the second meeting. The core activity stage received the very good category in both meetings. Furthermore, the closing stage experienced an increase from the good category in the first meeting to the very good category in the second meeting. The classroom atmosphere aspect also received the very good category in both meetings, while the time allocation aspect increased from the good category in the first meeting to the very good category in the second meeting. This increase indicates that teachers are increasingly able to implement learning in accordance with the CTL syntax integrated with PBL systematically and effectively. Overall, the average learning management score in Cycle I was 3.16, which is included in the good category, then increased in Cycle II to 3.77, which is included in the very good category. So it can be concluded that this increase shows that the quality of teacher learning management has improved in each cycle so that the implementation of learning has become more optimal in accordance with the research objectives.

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Student Activity Results

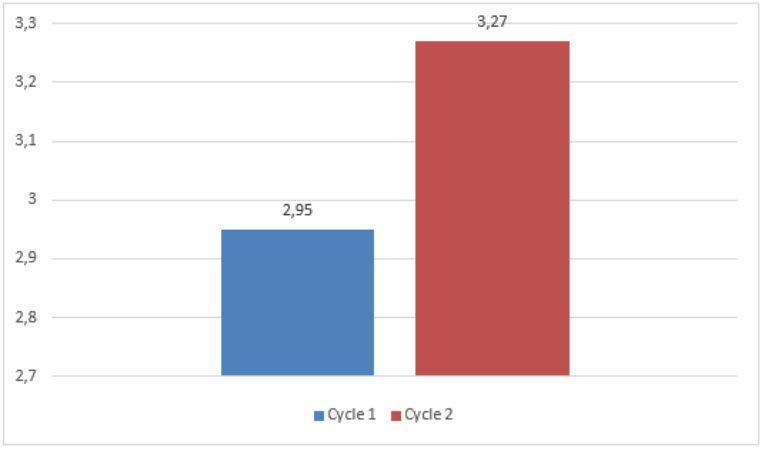

Figure 3 results of observations of student activities

Based on figure 3, student activity with the use of the CTL learning model coupled with PBL was deemed satisfactory at every level of the learning process, according to student participation. The average score for each learning stage in the first cycle was in the good category, then in the second cycle it was in the excellent category.

Results of students' opinions on integrated CTL PBL learning

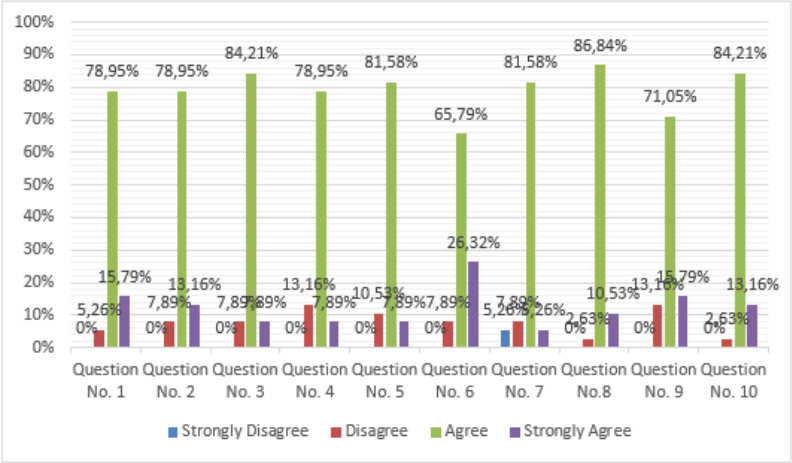

Figure 4 Student opinion results

Based on figure 4 obtained on the findings of the student questionnaire, data shows that from questions 1 to 10, the largest percentage is Strongly Agree (SA). From these results, it can be shown that, overall, students responded positively to the implementation of the CTL learning model integrated with PBL. Because economics subjects are connected to real-world issues and encourage active student participation in problem solving through group discussions and teamwork, students are more involved, enthusiastic, and motivated to follow the learning process. The most frequently expressed opinion is "I remember the content of the material more easily because I learn from real problems that occur around me" this opinion is the most frequently expressed response to question number eight. This question received a percentage of 86.84% and is categorized as very strong. Therefore, It is possible to draw the conclusion that student opinions on the application of the CTL Integrated PBL learning model are favorable.

Student Learning Outcomes

Data from post-tests in Cycles I and II allow us to compare student learning outcomes between the two cycles of CTL integrated with PBL. The purpose of this comparison is to determine the level of progress

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achieved after student participation in learning based on the application of the CTL model integrated with PBL. The following graph shows how student learning outcomes improved across the two cycles:

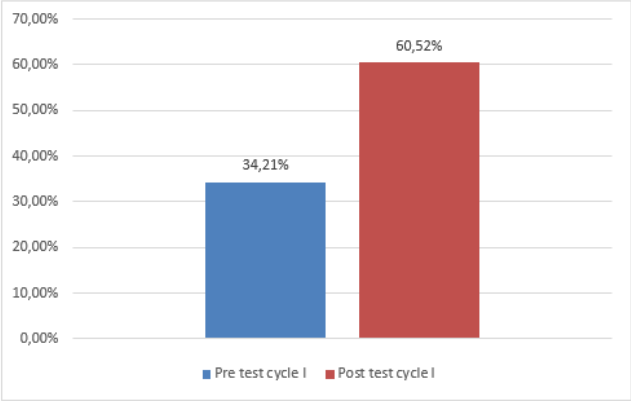

Figure 5 Data on improving student learning outcomes

Based on Figure 5, a descriptive increase in student learning outcomes was observed across the two classroom action cycles. In the first cycle, 23 students completed the posttest, with a classical completion rate of 60.52 percent, but this figure did not meet the classical completion standard. In the second cycle, there was an increase of 12 students, increasing the number of students completing the course from 23 in the first cycle to 35 in the second cycle, with a classical completion rate of 92.10 percent. Of the remaining 7.90 percent, or 3 students, did not achieve completion. Therefore, remedial work is required until individual completion scores reach at least 80 percent. These descriptive changes indicate that the implementation and refinement of CTL integrated with PBL across the classroom action cycles were accompanied by improvements in students' learning outcomes. This improvement can be observed in the increase in average scores and learning ability percentages in each research cycle, meeting the predetermined success indicators.

During the learning process, which implemented the CTL learning approach integrated with the PBL method, observations were made of teacher and student activities, and pre-tests and post-tests were also distributed to student learning outcomes. Observers' assessments of teacher and student activities were assessed by Economics teachers from SMAN 13 Surabaya and students of the 2023 Economics Education study program. After the lesson, the post-test was administered, while the pre-test was given before the lesson began. The following are the findings based on observations of the activities of teachers and students as well as the outcomes of the assessments conducted before and after the test as follows:

Cycle I

Based on observations of the activities of teachers and students, several shortcomings were identified, including: 1) The delivery of learning objectives was good, but further improvement is needed because students still lacked understanding of the learning objectives, as some students were not yet ready to receive the lesson. 2) The teacher posed prompt questions well, but further improvement is needed because some students still did not understand the prompt questions to provide opinions. 3) The teacher guided students in presenting group discussion results well, but further improvement is needed because some students did not understand the discussion results. 4) The teacher provided feedback, clarified concepts, and related them to everyday life. However, improvement is needed because the teacher's use of language was still difficult for students to understand. 5) The closing of the teaching and learning activity was good, but further improvement is needed because the break time was delayed, which made the learning process less conducive. 6) Time allocation was quite good, but improvements are still needed to ensure optimal learning.

Based on the pretest results obtained, it is still insufficient because only 13 students have met the learning completion level of 80 and for classical completion achieved by 34.21%. So it still does not meet the learning completion target set by the school, which is 80%. After the implementation of CTL

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learning integrated with the PBL method, and the post-test was conducted, it can be seen that as many as 23 students have met the individual completion with a score of 80, in accordance with the provisions in force at SMAN 13 Surabaya. Meanwhile, 15 students have not reached the completion standard because their scores do not meet the specified minimum criteria. Classical completion reached 60.52%, so it has not met the standard set by SMAN 13 Surabaya for learning completion of 80%. Therefore, the research should be continued in the next meeting, namely cycle II.

Cycle II

Based on observations of how teachers manage learning using the CTL approach integrated with the PBL method, as well as observations based on student activities during the two cycles and discussions with three observers, improvements were observed compared to the first meeting, including: 1) Teachers were able to convey learning objectives more clearly, engagingly, and systematically and ensure student readiness before the lesson began. This enabled students to better understand the learning objectives and better prepare for the teaching and learning activities. 2) Teachers were able to pose contextual, easily understood lead questions and provide appropriate stimuli, allowing students to feel more confident in sharing their thoughts and answering questions. 3) Teachers were able to effectively guide students in presenting the results of group discussions, enabling them to understand the prepared discussion results and to convey their findings more clearly and purposefully. 4) Teachers were able to provide feedback, correct inaccurate concepts, and relate learning material to everyday life using simple and communicative language, enabling students to more easily understand the material. 5) Teachers were able to conclude learning activities effectively and timely, allowing the learning process to proceed conducively without disrupting students' rest time. 6) Teachers are able to better manage and allocate learning time at each phase of the learning activity to maximize the implementation of the entire series of planned activities and successfully achieve learning objectives.

Based on the pretest results obtained, they were still insufficient because only 20 students met the learning completion criteria of 80%. Classical completion reached 52.63%, thus falling short of the school's standard of 80%. After the second round of posttests, it was found that 35 students had achieved individual completion and 92.10% had achieved classical completion. Consequently, the school's classical completion target of 80% was met in this second cycle. Therefore, it can be concluded that this research will not be continued to Cycle III.

Improved Cognitive Learning Outcomes for Students

Theoretically, research conducted on improving cognitive learning outcomes for students suggests that contextual learning gives students the opportunity to create their own understanding through meaningful learning experiences. By connecting concepts to real-world learning experiences, CTL supports students not only in memorizing material but also in understanding its meaning and applying it to real-world situations. This influences students' conceptual understanding and lends greater meaning to the learning process (Budiman, Samani, and Setyawan 2021; Susilawati et al. 2025).

These research findings are supported by (Perales and Bedoya Ulla 2025; Tungka et al. 2023), who state that implementing CTL in economics learning can raise student and educator engagement, which will enhance the quality of the learning experience. Research (Budiman, Samani, and Setyawan 2021; Mahmuti, Hamzić, and Thaqi 2025) state that learning is connected to real-world situations, the CTL approach can also boost students' enthusiasm to study and their communication skills, allowing them to participate more actively in conversations and voice their ideas. These findings are supported by (Prasetya and Trisnawati 2020; Siswanto, Andriyani, and Rambe 2025), who clarify that CTL learning has a favorable effect on learning motivation because students actively participate in the learning process.

Improved learning outcome are also influenced by the implementation of PBL, where students are given the opportunity to learn by finding solutions to real-world problems (Amerstorfer and Freiin von Münster-Kistner 2021; Komuhangi et al. 2025; Nicholus, Muwonge, and Joseph 2023). During the learning process, students are encouraged to identify problems, seek various sources of information, discuss with group members, and develop solutions based on the analysis (Vianis, Subroto, and Susanti

2022). These activities train critical thinking skills while deepening conceptual understanding, thus impacting student learning outcomes (Khasanah and Murwaningsih 2023; Marliah and Muthukrishnan 2025).

The results of this study align with those of (Perales and Bedoya Ulla 2025; Wati and Oknaryana 2025), state that using PBL to teach economics can enhance students' learning outcomes because students actively participate in the analysis and solution of assigned problems. Research indicates that using CTL can enhance economics learning outcomes. (Afni and Hartono 2020; Nugent et al. 2023). This is because learning is connected to real-world events experienced by students, making the topics studied easier to understand.

Overall, the findings show a descriptive improvement in learning outcomes across the classroom action cycles. The improvement occurred alongside changes in the learning process, particularly in students' involvement in connecting economic concepts with real-world situations through CTL and in analyzing and solving economic problems through PBL. These findings suggest that the integration of CTL and PBL provided a learning structure that was increasingly aligned with the classroom problems identified at the beginning of the study.

CONCLUSION

The study's findings showed that from the first to the second cycle, teacher participation in CTL-integrated PBL learning activities rose. This indicates that teachers were able to progressively implement the CTL-integrated PBL learning activities across the classroom action cycles. Additionally, student involvement showed a descriptive increase from the first to the second cycle. These findings indicate that the CTL-integrated PBL approach could be implemented as part of an iterative effort to improve the economics learning process. The implementation of this model successfully increased student engagement during the learning process, received very positive responses from students, and was accompanied by improvements in students' cognitive learning outcomes in the topics of monetary and fiscal policy across the action cycles. In implementing this learning model, it is better to organize students into groups before the start of the learning activity so that students are already in their respective groups from the beginning of the group discussion activity. Furthermore, the implementation of this learning model requires a relatively long time, so effective time management is needed to make the most of the time.

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