

EXPLORING THE ROLE OF PEER LESSONS IN DEVELOPING STUDENTS' CRITICAL THINKING SKILLS IN ECONOMICS EDUCATION

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ABSTRACT

This study aimed to examine the implementation of the Peer Lessons strategy in Economics learning and its contribution to the development of students' critical thinking skills at SMK Raudlatul Ulum Ledokombo Jember. Previous studies have largely focused on the effects of peer-assisted learning on academic achievement, while in-depth investigations into how Peer Lessons fosters critical thinking in vocational Economics education remain limited. This study contributes a contextual understanding of the relationship between peer-based instructional practices, collaborative learning processes, and critical thinking development in Economics classrooms. The findings identified four interconnected dimensions of implementation: planning, implementation, evaluation, and critical thinking development. This study employed a qualitative descriptive approach. Data were collected through classroom observations, semi-structured interviews, and document analysis involving one Economics teacher and 32 Grade XI students who directly participated in the learning process. Data were analyzed using an interactive model consisting of data condensation, data display, and conclusion drawing, while source triangulation was used to enhance the trustworthiness of the findings. The findings revealed that Peer Lessons promoted active participation, collaborative interaction, and reflective learning. Students demonstrated increased confidence in asking questions, expressing opinions, responding to peers' arguments, and analyzing Economics-related issues. Peer-based discussions facilitated conceptual understanding through accessible explanations and meaningful knowledge exchange. The study further found that heterogeneous grouping, peer tutoring, reflective evaluation, and contextual learning activities collectively supported the development of critical thinking skills. These findings suggest that Peer Lessons serves as an effective pedagogical strategy for fostering critical thinking and active engagement in vocational Economics education.

Keywords: *Peer Lessons; Critical Thinking Skills; Economics Learning; Peer-Assisted Learning*

ABSTRAK

Penelitian ini bertujuan untuk menganalisis implementasi strategi *Peer Lessons* dalam pembelajaran Ekonomi serta kontribusinya terhadap pengembangan kemampuan berpikir kritis siswa di SMK Raudlatul Ulum Ledokombo Jember. Kajian terdahulu umumnya berfokus pada pengaruh pembelajaran teman sebaya terhadap hasil belajar, sementara penelitian yang mengkaji secara mendalam proses implementasi *Peer Lessons* dalam mengembangkan kemampuan berpikir kritis pada pembelajaran Ekonomi di sekolah menengah kejuruan masih relatif terbatas. Penelitian ini menawarkan konstruksi konseptual mengenai keterkaitan antara

perencanaan, pelaksanaan, evaluasi, dan pembelajaran berbasis teman sebaya dalam mendukung perkembangan kemampuan berpikir kritis siswa. Temuan penelitian mengidentifikasi empat dimensi utama implementasi, yaitu perencanaan, pelaksanaan, evaluasi, dan pengembangan kemampuan berpikir kritis. Penelitian ini menggunakan pendekatan kualitatif deskriptif. Data dikumpulkan melalui observasi kelas, wawancara semi-terstruktur, dan studi dokumentasi yang melibatkan satu guru mata pelajaran Ekonomi dan 32 siswa kelas XI yang terlibat langsung dalam penerapan strategi *Peer Lessons*. Analisis data dilakukan menggunakan model analisis interaktif yang meliputi kondensasi data, penyajian data, dan penarikan kesimpulan, sedangkan triangulasi sumber digunakan untuk meningkatkan keabsahan temuan penelitian. Hasil penelitian menunjukkan bahwa strategi *Peer Lessons* mampu meningkatkan partisipasi aktif, interaksi kolaboratif, dan keterlibatan reflektif siswa dalam pembelajaran Ekonomi. Siswa menunjukkan peningkatan keberanian dalam bertanya, mengemukakan pendapat, memberikan tanggapan, menyusun argumentasi, dan menganalisis berbagai persoalan ekonomi. Diskusi berbasis teman sebaya membantu siswa memahami konsep ekonomi secara lebih mendalam melalui pertukaran pengetahuan yang lebih komunikatif dan kontekstual. Temuan penelitian juga menunjukkan bahwa pembentukan kelompok heterogen, peran tutor sebaya, evaluasi reflektif, dan pembelajaran kontekstual menjadi faktor penting dalam mendukung perkembangan kemampuan berpikir kritis siswa.

Kata Kunci: *Peer Lessons*, kemampuan berpikir kritis, pembelajaran ekonomi, pembelajaran teman sebaya,

A. Introduction

Education is a fundamental process in building the quality of human resources capable of adapting to dynamic social, economic, and technological changes. In the philosophical perspective of constructivism, learning is understood as an active process where learners build knowledge thru experience, social interaction, reflection, and interpretation of the reality they face (Felten et al., 2023). Therefore, learning is no longer viewed as a process of transferring knowledge from the teacher to the students, but

rather as an activity that encourages students to construct their understanding independently thru active intellectual engagement. This perspective aligns with the demands of 21st-century education, which places critical thinking, communication, collaboration, and creativity as the main competencies that students must possess to face the complexities of modern life and the workforce (Lombardi et al., 2021).

In the context of national education, learning objectives are not only oriented toward achieving academic results but also toward

developing thinking skills that enable students to analyze information, solve problems, and make rational decisions (Husna et al., 2025). Law Number 20 of 2003 on the National Education System emphasizes that education aims to develop students' potential to become knowledgeable, creative, independent, and responsible individuals (Noor, 2018). That goal implies that the learning process must be designed in such a way that students have the opportunity to actively participate in building knowledge. One of the approaches relevant to this principle is collaborative learning, which provides space for students to learn from each other, discuss, and share understanding thru interactions with peers (Gillies, 2019).

The subject of Economics at the Vocational High School level has characteristics that demand critical thinking skills because the material studied is directly related to various real-life phenomena (Stevana et al., 2025). Concepts such as scarcity, opportunity cost, consumer behavior, production activities, distribution, consumption, and economic decision-making require analytical skills that cannot be achieved thru mere

memorization of concepts. Students are required to understand the cause-and-effect relationships of an economic phenomenon, evaluate the available information, and formulate solutions based on logical considerations. Therefore, Economics learning is ideally designed to encourage active student engagement in the processes of thinking, discussing, and solving contextual problems (Nepal & Rogerson, 2020).

However, various studies show that students' critical thinking skills still pose a challenge in the learning process. According to Haber, critical thinking is a reflective and rational thinking process that focuses on determining what should be believed or done (Haber, 2020). These abilities include skills in analyzing arguments, evaluating evidence, drawing inferences, and making decisions based on justifiable reasoning. ⁴ In practice, many students still have difficulty connecting the concepts they learn with real-life situations, presenting logical arguments, or solving problems systematically. This condition indicates that the ongoing learning process has not yet fully facilitated the optimal development of students' critical thinking skills.

In the context of Economics learning, low critical thinking skills can impact students' limited ability to understand and solve various economic problems occurring in their surroundings (Tina et al., 2025). Students tend to memorize definitions and concepts without being able to explain the relationships between concepts or apply them in real life. This phenomenon is also still found in various vocational high schools in Indonesia, including those that implement competency-based learning. Therefore, a learning strategy is needed that is not only oriented toward the delivery of material but also capable of encouraging students to actively participate in the processes of analysis, discussion, and reflection so that critical thinking skills can develop more optimally. Therefore, a learning strategy is needed that not only focuses on delivering material but also encourages students to actively participate in the processes of analysis, discussion, and reflection so that critical thinking skills can develop more optimally (Sharoff, 2019).

One of the learning strategies that has the potential to develop students' critical thinking skills is Peer

Lessons. Indriayu explains that Peer Lessons is a learning strategy that gives students the responsibility to study a material and teach it back to their peers (Indriayu, 2025). Through these activities, students are not only required to understand the material in depth but also to be able to explain, defend arguments, answer questions, and discuss various perspectives that arise during the learning process. These activities indirectly train the abilities of analysis, communication, and evaluation, which are important components of critical thinking (Lee et al., 2021).

Several previous studies have shown that collaborative learning strategies and peer tutoring have a positive contribution to the improvement of students' critical thinking skills. Research by Berlianti and Jaya found that peer tutoring-based learning can enhance students' learning activities and problem-solving abilities (Berlianti & Jaya, 2026). Similar findings were reported by Tullis and Goldstone, which showed that peer learning has a significant impact on students' conceptual understanding and cognitive engagement (Tullis & Goldstone, 2020). Another study by Erdogan

indicated that peer teaching activities can improve reflective thinking skills and strengthen students' conceptual understanding (Erdogan, 2019).

However, a review of previous research indicates that most studies on peer tutoring and collaborative learning still focus on improving learning outcomes or academic abilities in general. Research specifically examining the implementation of the Peer Lessons strategy in Economics education at the Vocational High School level is still relatively limited. Moreover, most studies use a quantitative approach that emphasizes outcome measurement, while research that deeply explores the planning, evaluation, and contribution of the Peer Lessons strategy to the development of students' critical thinking skills has not been extensively conducted. This indicates the existence of an important area of study that needs further development.

Based on the aforementioned description, this research starts from the argument that the Peer Lessons strategy has the potential to develop students' critical thinking skills through active involvement in the learning process, discussions, and peer

learning. This research assumes that the higher the students' involvement in explaining, defending, and discussing Economic material with their peers, the more their critical thinking skills will develop. The main contribution of this research lies in the in-depth study of the implementation of the Peer Lessons strategy in the Economics learning of the 11th grade at SMK Raudlatul Ulum Ledokombo Jember, which has not been extensively researched in previous studies. Thus, this research is expected to enrich the body of knowledge in Economics education studies while also providing relevant alternative teaching strategies to develop students' critical thinking skills at the vocational education level.

B. Methods

This study employed a qualitative descriptive approach to explore the implementation of the Peer Lessons strategy and its contribution to the development of students' critical thinking skills in Economics learning at SMK Raudlatul Ulum Ledokombo Jember. A qualitative design was selected because the study aimed to obtain an in-depth understanding of how the

strategy was planned, implemented, and experienced by participants in a natural classroom setting rather than measuring causal relationships between variables (Mtisi, 2022). This approach enabled the researcher to capture the dynamics of classroom interaction, students' participation, and the learning processes that emerged during the implementation of Peer Lessons (Zhou, 2025).

The research focused on Economics teachers and Grade XI students who were directly involved in the learning activities, as they were considered the most relevant sources for understanding the instructional practices and their influence on students' critical thinking development.²

Data were collected through classroom observations, semi-structured interviews, and documentation. Observations were conducted to examine the actual implementation of Peer Lessons, including student engagement, peer interaction, discussion patterns, and classroom participation. Interviews with teachers and students were used to explore their experiences, perceptions, and responses regarding the use of the strategy in Economics

learning. Supporting documents, such as lesson plans, learning materials, student assignments, and assessment records, were also analyzed to strengthen the credibility of the findings (Chand, 2025). The combination of these techniques allowed the researcher to obtain comprehensive and contextual data concerning both instructional processes and learning experiences.

The collected data were analyzed using an interactive qualitative analysis model consisting of data condensation, data display, and conclusion drawing (Mizwar et al., 2026). Data obtained from different sources were continuously compared and interpreted to identify recurring patterns related to the implementation of Peer Lessons and the development of students' critical thinking skills. This analytical procedure enabled the researcher to construct a comprehensive understanding of how peer-based learning activities encouraged students to express ideas, evaluate information, formulate arguments, and participate actively in Economics learning. To enhance trustworthiness, findings from observations, interviews, and documentation were cross-checked

through data triangulation, ensuring that the interpretations accurately reflected the participants' experiences and the actual learning context.

C. Result and Discussion

1. Planning Peer Lessons Strategy as the Foundation for Active and Collaborative Economics Learning

Research findings indicate that the implementation of the Peer Lessons strategy in Economics learning begins with systematic lesson planning thru the preparation of teaching modules, setting learning objectives, providing student worksheets (LKPD), and designing evaluation mechanisms integrated with learning activities. These findings indicate that the implementation of learning strategies oriented toward the development of critical thinking skills cannot be done spontaneously, but rather requires thorough and structured planning. In the context of Economics learning, systematic planning becomes an important prerequisite because the material studied not only requires conceptual understanding but also the ability of students to analyze economic phenomena, present arguments, and

make decisions based on rational considerations. Therefore, the lesson planning conducted by the teacher in this study can be interpreted as an effort to create a learning environment that supports students' intellectual engagement from the beginning of the learning process (Nagro et al., 2019).

The research findings also show that the selection of the Peer Lessons strategy is based on the need to enhance students' active participation in Economics learning. The teacher's decision to make students a learning resource for their peers indicates a shift in the learning paradigm from a teacher-centered approach to a student-centered approach (Awacorach et al., 2021). These findings align with social constructivism theory, which emphasizes that knowledge is built thru social interaction, dialog, and collaboration among learners (Darmawan & Ramli, 2025). From this perspective, the learning process occurs not only when students receive explanations from the teacher but also when they explain the material, exchange ideas, and discuss their understanding with their peers. Thus, the planning of the Peer Lessons strategy in this study shows that

teachers not only strive to deliver material but also design conditions that allow students to actively participate in building their own knowledge (Sormunen et al., 2020).

The appointment of peer tutors based on academic ability, communication skills, and level of confidence is an important finding that indicates the success of Peer Lessons implementation is greatly influenced by the quality of the teacher's planning. The results of this study indicate that peer tutors are not selected solely based on high academic achievement, but also considering their interpersonal skills that enable them to function as learning facilitators within the group (Leung, 2019). These findings reinforce the research by Siregar which states that the effectiveness of peer-based learning is greatly influenced by the tutor's ability to explain the material, build communication, and encourage group members' engagement in the learning process (Siregar, 2025). In the context of Economics learning, the presence of peer tutors with good communication skills becomes an important factor because economic material often requires contextual

explanations that are easy for students to understand.

The next finding shows that teachers form heterogeneous study groups by considering the variation in students' academic abilities. The formation of diverse groups allows for processes of mutual assistance, exchange of understanding, and more dynamic discussions compared to homogeneous groups. These findings align with the research by Tullis and Goldstone, which found that peer learning has a stronger impact when it involves interactions between students with different levels of understanding, as the processes of explaining, questioning, and clarifying information can deepen learners' conceptual understanding (Tullis & Goldstone, 2020). In this study, heterogeneous groups not only serve as a platform for collaboration but also as a learning space that allows students to gain diverse perspectives in understanding various economic concepts. The situation shows that planning study groups is an important part of the Peer Lessons strategy because it determines the quality of academic interactions that occur during the learning process (Indriayu, 2025).

Based on these findings, it can be understood that the planning of Peer Lessons strategies in this study not only serves as an administrative stage of learning but also becomes a pedagogical foundation that supports the creation of active, collaborative, contextual, and critical thinking-oriented Economics learning.

2. Evaluation of Peer Lessons Strategy in Enhancing Participation and Reflection in Economics Learning

Research findings indicate that learning evaluation thru the Peer Lessons strategy is not only focused on learning outcomes but also on the learning process that takes place in the classroom. Teachers conduct evaluations thru observing student participation during discussions and presentations, assessing group assignments, and reviewing learning reflections written by students. These findings indicate that the evaluation is conducted comprehensively, taking into account cognitive, affective, and participatory aspects (Limbu, 2024). In the perspective of assessment for learning, evaluation functions not only to measure learning achievements but also to obtain information regarding the development of students' learning

processes as a basis for continuous improvement of learning (Adom et al., 2020). Thus, the evaluation applied shows a shift from outcome-oriented assessment to assessment that also places the learning process as an important part of learning success.

The research findings also indicate that the assessment of group tasks is used to identify students' understanding of Economics material. The use of group tasks emphasizes that learning not only focuses on individual achievement but also on the ability to collaborate in understanding and solving problems (Nurhidayanti, 2025). These findings are in line with the research by Karina et al., which shows that collaborative learning contributes to the enhancement of conceptual understanding thru the processes of mutual explanation, clarification, and reinforcement of understanding within groups (Karina et al., 2024). In Economics learning, this process is important because many concepts require reasoning and analysis that are more effective when discussed together compared to being studied individually. Thus, group assignments not only serve as evaluation tools but also as a means

to reinforce students' understanding of the learning material (Lin et al., 2021).

Another finding shows that most students find it easier to understand the material when they receive explanations from their groupmates. This indicates that peer interaction plays an important role in helping students build a better understanding of Economics material. This finding is in line with the research by Tullis and Goldstone, which states that peer learning is effective because students tend to use simpler language and relate it to their peers' experiences, making complex concepts easier to understand (Tullis & Goldstone, 2020). From a pedagogical perspective, these results indicate that the learning process can develop not only thru teachers but also thru the sharing of knowledge among students (Jesuthasan et al., 2022). Thus, student reflections confirm that the Peer Lessons strategy can enhance participation while simultaneously strengthening students' conceptual understanding.

However, the overall evaluation results still show an increase in student participation compared to before the implementation of the Peer Lessons strategy. Therefore, this

strategy has strong potential to create a more participatory, reflective, and student-centered Economics learning experience, although it still requires teacher guidance to ensure that all students can engage optimally.

3. Peer Lessons Strategy in Developing Students' Critical Thinking Skills in Economics Learning

Research findings indicate that the implementation of the Peer Lessons strategy contributes to the development of students' critical thinking skills in Economics learning. This is evident from the increased courage of students to ask questions, express opinions, provide responses, and explain the reasons underlying their arguments. These findings show that Peer Lessons not only enhance student participation but also encourage a more reflective and analytical thinking process (Zendrato et al., 2025). In the perspective of critical thinking, the ability to ask questions, provide reasons, and present arguments are indicators of students' engagement in actively processing and evaluating information (Chen et al., 2024). Therefore, the increase in these activities can be interpreted as the development of

critical thinking skills, which is one of the main objectives of Economics education.

Research findings also indicate that group discussions are an important factor in fostering students' critical thinking skills. Thru discussions, students can exchange ideas, ask questions, explain concepts, and respond to various emerging viewpoints. These findings align with Vygotsky's social constructivism theory, which states that cognitive development occurs thru social interaction and collaboration (Malik et al., 2025). In this study, interaction during discussions not only helps students understand economic concepts but also encourages them to test and refine their understanding based on information from peers. Thus, group discussions become an important means of developing students' critical thinking (Abidin et al., 2025).

The research results showing activities of information clarification, correction of misunderstandings, and argumentation preparation indicate that students have engaged in higher-order thinking processes. These findings support Angelito Calma's view that critical thinking

encompasses the abilities of interpretation, analysis, evaluation, inference, and rational explanation (Calma & Davies, 2026). When students clarify information and evaluate their peers' opinions, they engage in a reasoning process that goes beyond mere memorization. In Economics learning, this ability is important because various economic issues require critical analysis before a decision is made.

Interview data shows that students find it easier to understand the material thru peer explanations. These findings are in line with the research by Tullis and Goldstone, which states that peer learning effectively enhances conceptual understanding because students tend to use simpler language that is easier for their peers to understand (Tullis & Goldstone, 2020). In addition to helping the students receiving the explanation, this process also benefits the students acting as tutors because they are required to organize knowledge and construct logical explanations. Thus, the Peer Lessons strategy benefits all group members.

Overall, the research findings indicate that the Peer Lessons strategy successfully created a more

active, collaborative, and participatory learning environment, thereby supporting the development of students' critical thinking skills. The increase in participation in discussions, the courage to express opinions, the ability to construct arguments, and the engagement in analyzing economic issues indicate that learning is not only focused on the transfer of information but also on the development of thinking skills. These findings are in line with various studies that conclude that collaborative learning and peer-assisted learning contribute to the development of students' critical thinking, communication, and problem-solving skills (Jiang et al., 2023; Xu et al., 2024). Therefore, the Peer Lessons strategy not only enhances learning activity but also helps students build and develop their knowledge independently.

D. Conclusion

This study shows that the implementation of the Peer Lessons strategy in Economics learning at SMK Raudlatul Ulum Ledokombo Jember contributes to the development of students' critical thinking skills thru more active,

collaborative, and participatory learning. Systematic lesson planning, the implementation of peer tutor-based discussions, and evaluations that emphasize the learning process and reflection create a learning environment that encourages students to ask questions, express opinions, provide arguments, and analyze economic problems more deeply. Research findings also indicate that peer interactions help students understand economic material more easily thru explanations that use language closer to their everyday experiences.

In general, the Peer Lessons strategy not only increases student participation in discussion and presentation activities but also strengthens students' argumentative skills and engagement in the process of analyzing various economic issues. Nevertheless, this study has limitations because it was conducted in one school with a focus on one subject and used a qualitative approach, so the results cannot yet be widely generalized. In addition, this study has not quantitatively measured the improvement in critical thinking skills thru standardized instruments.

Future research is recommended to involve more schools, educational levels, and different learning contexts to obtain a more comprehensive picture of the effectiveness of the Peer Lessons strategy. Subsequent studies could also use mixed methods or experimental designs to more objectively measure the impact of this strategy on critical thinking skills, learning outcomes, and other important skills.

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