



The Effectiveness of Training on the Implementation of the Question and Answer Method in Enhancing Students' Critical Thinking Skills at SD Negeri 58 Palembang

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ABSTRAK

Penelitian ini bertujuan untuk mengkaji efektivitas pelatihan implementasi metode tanya jawab dalam meningkatkan kemampuan berpikir kritis siswa di SD Negeri 58 Palembang. Kemampuan berpikir kritis merupakan salah satu kompetensi penting yang harus dimiliki siswa sekolah dasar untuk menghadapi tantangan pembelajaran abad ke-21. Penelitian ini menggunakan pendekatan deskriptif kualitatif dengan melibatkan guru dan siswa kelas V SD Negeri 58 Palembang. Data dikumpulkan melalui observasi, catatan lapangan, dan dokumentasi selama pelaksanaan pelatihan serta proses pembelajaran. Fokus pengamatan meliputi partisipasi siswa dalam menjawab pertanyaan, kemampuan mengemukakan pendapat, memberikan alasan terhadap jawaban, serta interaksi antara guru dan siswa selama kegiatan belajar mengajar. Hasil penelitian menunjukkan bahwa pelatihan implementasi metode tanya jawab efektif dalam meningkatkan keterlibatan, kepercayaan diri, dan partisipasi aktif siswa dalam pembelajaran. Siswa menunjukkan peningkatan kemampuan dalam mengemukakan pendapat, memberikan argumentasi yang logis, serta merespons pertanyaan secara lebih kritis. Selain itu, interaksi pembelajaran menjadi lebih dinamis, interaktif, dan berpusat pada siswa. Dengan demikian, pelatihan implementasi metode tanya jawab dapat menjadi strategi yang efektif untuk mengembangkan kemampuan berpikir kritis siswa sekolah dasar.

ABSTRACT

This study aimed to examine the effectiveness of training on the implementation of the Question-and-Answer Method in enhancing students' critical thinking skills at SD Negeri 58 Palembang. Critical thinking is an essential competency for elementary school students in the 21st century, enabling them to analyze information, express opinions, and draw logical conclusions. This study employed a qualitative descriptive approach involving fifth-grade students and teachers at SD Negeri 58 Palembang. Data were collected through classroom observations, field notes, and documentation during the implementation of the training and learning activities. The observations focused on students' participation in answering questions, expressing opinions, providing reasoning, and interacting with teachers during classroom discussions. The findings revealed that the training effectively supported the implementation of the Question-and-Answer Method, resulting in increased student engagement, confidence, and participation in learning activities. Students demonstrated improved abilities to express ideas, justify their answers, and respond critically to questions. Furthermore, classroom interactions became more dynamic, interactive, and student-centered. The study concludes that training on the implementation of the Question-and-Answer Method is effective in fostering critical thinking skills among elementary school students and can serve as a practical strategy for creating active and meaningful learning environments.



1. INTRODUCTION

Education plays a fundamental role in developing qualified human resources capable of facing the challenges of the modern era. In the context of 21st-century education, the learning process is expected not only to focus on knowledge acquisition but also on the development of higher-order thinking skills, particularly critical thinking (Dash, 2022; Zhang & Ma, 2023; Saimon et al., 2023). Critical thinking skills enable students to understand information, analyze problems, evaluate arguments, and make logical and rational decisions (Jaya et al., 2023; Umami et al., 2023; Lintang Sari et al., 2022).

According to Ennis (2023), critical thinking is reflective and reasonable thinking focused on deciding what to believe or do. Similarly, Facione (2023) defines critical thinking as a set of cognitive skills that includes interpretation, analysis, evaluation, inference, and explanation, all of which are essential for effective problem-solving. These perspectives highlight the importance of fostering critical thinking skills from the elementary school level.

Despite its importance, several studies have revealed that many elementary school students still demonstrate limited critical thinking abilities. Wahyuni et al. (2024) found that classroom instruction at the elementary level is often dominated by teacher-centered approaches, providing students with limited opportunities to actively participate in questioning, responding, and expressing their opinions during learning activities. As a result, students tend to become passive learners and rely heavily on teachers for information. Furthermore, Susanto (2023) argued that teacher-centered learning environments may hinder students' independence in thinking and problem-solving. Therefore, educators need to adopt more interactive and student-centered teaching strategies that actively engage learners and encourage the development of critical thinking skills.

One instructional approach that can support the development of critical thinking is the Question-and-Answer Method. According to Suryani (2024), this method involves direct interaction between teachers and students through structured questioning and answering activities. Such interactions encourage students to think actively, formulate responses, and express their ideas based on their understanding of the subject matter. In addition, Hidayat et al. (2023) reported that interactive learning methods, including the Question-and-Answer Method, significantly improve student engagement and promote critical thinking skills. Through questioning activities, students are encouraged to provide answers supported by logical reasoning, thereby enhancing their analytical and evaluative abilities. To maximize the effectiveness of this instructional approach, teachers need adequate training on how to implement the Question-and-Answer Method effectively in classroom settings. Training can equip teachers with the knowledge and skills required to facilitate meaningful discussions, encourage student participation, and create a learning environment that supports critical thinking development.

Therefore, this study investigates the effectiveness of training on the implementation of the Question-and-Answer Method in enhancing students' critical thinking skills at SD Negeri 58 Palembang. The findings are expected to contribute to the improvement of teaching practices and provide practical insights for promoting active and critical learning among elementary school students.

2. METHOD

2.1 *Research Approach and Design*

This study employed a descriptive qualitative research design. The descriptive qualitative approach was selected because the purpose of the study was to explore and describe the effectiveness of training on the implementation of the Question-and-Answer Method in enhancing students' critical thinking skills at the elementary school level. Qualitative research focuses on understanding meanings, processes, and phenomena within their natural settings without manipulating existing variables (Tisdell et al., 2025; Patton, 2020; Creswell, 2022). The findings of this study provide a comprehensive description of classroom learning activities and the impact of the training on instructional practices. This approach was considered appropriate because students' critical thinking skills cannot be measured solely through academic scores but can also be observed through their ability to answer questions, express opinions, provide logical reasoning, and analyze problems during classroom interactions.

2.2 *Research Site and Time*

The study was conducted at SD Negeri 58 Palembang during the School Field Introduction Program (*Pengenalan Lapangan Persekolahan/PLP*). The school was selected based on preliminary observations indicating that classroom instruction was predominantly teacher-centered, resulting in limited student

participation and critical engagement in learning activities. The research was carried out throughout the PLP program while teachers implemented the Question-and-Answer Method following the training sessions provided.

2.3 Research Participants

The participants of this study consisted of teachers and fifth-grade students who were actively involved in the teaching and learning process. Participants were selected using purposive sampling, which involves choosing individuals based on specific criteria relevant to the objectives of the study. Students were selected because they were the primary focus in assessing the development of critical thinking skills, while teachers were selected because they participated in the training and implemented the Question-and-Answer Method in classroom instruction.

2.4 Data Collection Techniques

Data were collected through participant observation (Van Maanen, 2025). In this study, the researcher was directly involved in classroom activities, allowing for a deeper understanding of the learning process and classroom dynamics. During the observations, the researcher focused on the following aspects:

- a. Students' participation in answering teachers' questions;
- b. Students' ability to express their opinions;
- c. Students' ability to provide logical reasoning for their answers;
- d. Interactions between teachers and students during question-and-answer sessions;
- e. Students' responses to analytical and higher-order thinking questions.

In addition to observation, field notes were used to document significant events and learning activities that occurred throughout the implementation process.

2.5 Research Instruments

The primary instrument in this qualitative study was the researcher. The researcher was responsible for planning the study, collecting data, analyzing findings, and presenting the results. To support the data collection process, several additional instruments were utilized:

- a. Student activity observation sheets;
- b. Field notes;
- c. Documentation of teaching and learning activities.

The observation sheets were designed to help identify and record indicators of students' critical thinking skills throughout the learning process.

2.6 Data Analysis Techniques

Data analysis was conducted using a descriptive qualitative approach (Thornbury, 2023). The analysis involved three stages. First, data reduction was performed by selecting and focusing on information related to the implementation of the Question-and-Answer Method and students' critical thinking skills. Second, data presentation was carried out by organizing the collected information into a systematic and understandable form to reflect actual classroom conditions. Finally, conclusions were drawn based on the findings obtained during the study, particularly regarding changes in students' critical thinking skills following the training and implementation of the Question-and-Answer Method.

3. RESULT AND DISCUSSION

Based on observations conducted during the School Field Introduction Program (PLP) at SD Negeri 58 Palembang, the implementation of training on the Question-and-Answer Method demonstrated a positive impact on classroom learning activities. The findings revealed significant improvements in students' participation, confidence in expressing ideas, classroom interaction, and the development of critical thinking skills. These results indicate that the Question-and-Answer Method can serve as an effective instructional strategy for promoting active learning and fostering higher-order thinking among elementary school students.

Prior to the implementation of the training, classroom instruction was predominantly teacher-centered. Teachers mainly delivered information through explanations and lectures, while students tended to function as passive recipients of knowledge. Initial classroom observations showed that out of approximately 30 students, only 5–7 students regularly responded to teachers' questions. Most students remained silent, hesitant, and reluctant to participate in discussions, even when opportunities were provided. This situation suggested that

students were not yet accustomed to actively engaging in the learning process or expressing their ideas publicly. The classroom teacher confirmed this condition during an interview:

“Before the implementation of the Question-and-Answer Method, students usually waited for explanations from the teacher. When questions were asked, only a few students responded, while the majority remained silent because they were afraid of giving incorrect answers.” (Interview with the classroom teacher, PLP Program, 2025)

This finding is consistent with the argument of Che-Aron and Matcha (2023), who criticized traditional teacher-centered instruction for positioning students as passive recipients rather than active participants in constructing knowledge. Such learning environments often limit opportunities for critical thinking and meaningful classroom interaction.

Following the training, teachers began implementing more structured and interactive questioning techniques. Rather than focusing solely on factual recall, teachers asked questions that encouraged students to analyze, interpret, compare, and explain concepts. Classroom observations indicated that students became more attentive and engaged because they were provided with greater opportunities to participate in discussions and respond to questions.

Field notes documented several instances where students who had previously remained silent voluntarily raised their hands to answer questions. During one lesson, for example, approximately 18 students actively participated in responding to teacher questions, representing a substantial increase compared to the initial observations. Although many responses were still relatively simple, the increased willingness to participate reflected growing confidence and engagement. One student expressed:

“I like answering questions now because the teacher gives us time to think first. Even if my answer is not perfect, the teacher helps me improve it.” (Student Interview, 2025)

This statement suggests that the classroom environment became more supportive and less intimidating, encouraging students to take intellectual risks and express their thoughts more freely.

As the implementation progressed, teacher–student interactions became increasingly dynamic and collaborative. Teachers not only presented information but also facilitated discussions by encouraging students to explain their reasoning and elaborate on their answers. Students demonstrated greater effort in understanding questions before responding. In several observed lessons, students discussed possible answers with classmates before presenting their ideas to the class. This collaborative process helped students construct knowledge actively rather than simply memorizing information. The classroom teacher further explained:

“The students have become more willing to share their opinions. Some students who rarely spoke before now actively participate in discussions and try to explain their answers.” (Interview with the classroom teacher, 2025)

Another important finding was the improvement in students’ reasoning abilities. Although their explanations remained relatively basic, many students began providing reasons and evidence to support their answers. For example, when discussing environmental conservation, several students connected classroom content with their personal experiences at home and in their communities. Such responses demonstrated early indicators of critical thinking, including interpretation, reasoning, and the ability to establish relationships between concepts and real-life situations.

These findings support the framework proposed by Ratih and Arsih (2024), who defines critical thinking as reasonable and reflective thinking focused on deciding what to believe or do. According to Ennis, critical thinking involves analyzing information, evaluating evidence, and providing logical justifications for conclusions. The students’ ability to explain their answers and relate concepts to personal experiences suggests the emergence of these critical thinking processes.

Furthermore, the findings align with the work of Anderson and Krathwohl (2019) and colleagues, who emphasize that higher-order thinking develops when learners are encouraged to analyze, evaluate, and create

rather than merely remember information. Through structured questioning, students were gradually guided beyond memorization toward deeper cognitive engagement.

The classroom atmosphere also became more interactive, engaging, and student-centered. Observation records indicated that students maintained greater focus during lessons and appeared more motivated to participate. The number of students involved in discussions increased steadily throughout the implementation period. Even students who were initially reluctant to participate showed greater enthusiasm and willingness to answer questions or share opinions.

These findings are consistent with research conducted by Shanmugavelu et al. (2020), who argued that carefully designed questioning techniques can stimulate students' thinking processes and promote intellectual development. Similarly, a study by Critelly and Tritapoe (2019) found that effective questioning strategies increase student participation, engagement, and critical thinking by encouraging learners to actively process and evaluate information.

Overall, the findings suggest that the training successfully supported the implementation of the Question-and-Answer Method and contributed positively to the development of students' critical thinking skills. Students became more active participants in learning, demonstrated greater confidence in expressing ideas, and showed emerging abilities to justify and explain their responses. Although their critical thinking skills were still developing and had not yet reached advanced levels, clear evidence of progress was observed throughout the learning process.

Therefore, the continuous implementation of interactive instructional approaches such as the Question-and-Answer Method is recommended to further strengthen students' critical thinking abilities in elementary education. Sustained use of questioning techniques that promote analysis, reflection, and reasoning may help students develop the cognitive skills necessary for lifelong learning and problem-solving in increasingly complex educational contexts.

4. CONCLUSION

The findings of this study, obtained through direct observations and interviews conducted during the School Field Introduction Program (PLP) at SD Negeri 58 Palembang, indicate that training on the implementation of the Question-and-Answer Method had a positive effect on the development of students' critical thinking skills during the teaching and learning process.

First, the implementation of the Question-and-Answer Method increased students' active participation in classroom activities. This was evident from the growing number of students who responded to teachers' questions. Prior to the implementation, many students tended to remain silent and passive during lessons. However, after teachers applied the method following the training, students demonstrated greater confidence in responding to questions and participating in classroom discussions. This finding suggests that interactive questioning can encourage student engagement and create a more active learning environment.

Second, the method contributed to the development of students' self-confidence. Students became more willing to express their opinions and provide answers independently rather than relying on their peers. Although many responses were still relatively simple, students showed increased courage in sharing their ideas without fear of making mistakes. This improvement reflects the importance of creating a supportive classroom atmosphere that encourages active participation.

Third, the Question-and-Answer Method gradually fostered students' critical thinking skills. Students began to demonstrate the ability to understand questions, analyze possible responses, and provide reasons to support their answers. Although the level of reasoning remained basic, these behaviors represent important indicators of emerging critical thinking abilities among elementary school students.

Fourth, the implementation of the method made learning activities more engaging and participatory. Classroom interactions became more dynamic, and communication between teachers and students improved significantly. As a result, students appeared more interested, motivated, and focused during lessons. The learning process became more meaningful because students were actively involved in constructing their understanding rather than simply receiving information from the teacher.

Overall, the findings demonstrate that training on the implementation of the Question-and-Answer Method is an effective strategy for enhancing elementary school students' critical thinking skills. While students' critical thinking abilities are still developing, the positive changes observed in participation, confidence, reasoning, and classroom engagement indicate that the method has considerable potential to support meaningful learning. Therefore, its consistent implementation is recommended to further promote critical thinking development in elementary education settings.

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