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Improving Junior High School Students Critical Thinking Skills in Social Studies through Contextual Teaching and Learning (CTL) Assisted by Video Media: A Classroom Action Research

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Abstract

The low critical thinking ability of grade VIII-A SMPN 2 Pamekasan students in social studies subjects is characterized by difficulties in solving high-level cognitive problems, low activeness in learning, and inability to relate material to real-life contexts. This study aims to determine the improvement of students' critical thinking skills through the application of the Contextual Teaching and Learning (CTL) learning model with video media. The research uses the Classroom Action Research (PTK) method with a mixed method approach which is carried out in two cycles, each including the stages of planning, action, observation, and reflection. The subject of the study is 33 students of class VIII-A SMPN 2 Pamekasan for the 2024/2025 school year. Data collection techniques include observation of teacher and student activities, critical thinking ability tests, and documentation. The research instruments are in the form of observation sheets and test questions based on Facione's critical thinking indicators, namely interpretation, analysis, evaluation, and inference. Data analysis was carried out descriptively, quantitatively, and qualitatively. The results showed that the application of the CTL model with video media was able to improve students' critical thinking skills, which was shown by an increase in classical completeness from 52% in the pre-cycle to 67% in the first cycle and 85% in the second cycle. Teacher and student activities have also increased significantly. Thus, the CTL model assisted by video media is effectively used in social studies learning.

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1. Introduction

The movement of the global era and the advancement of increasingly sophisticated and cutting-edge science and technology will have an impact on all fields of life. In the 21st century, science and technology have a very important position in the world of education, providing an optimal experience for students [1]. Skills required to compete globally in the 21st century include innovation, creativity, critical analysis, independence, teamwork, curiosity for information, and effective communication [2]. Students need to build critical thinking skills as an important weapon to deal with today's increasingly complex world.

Critical thinking skills are important, but the reality on the ground has not met expectations. This is evidenced by the low PISA score *(Programme for International Student Assessment)* Indonesia in recent years. The data shows that Indonesian students only reach level 1 and level 2 of the level 6 questions, which shows the critical thinking skills of Indonesian students [3]. In addition, the design, implementation, and curriculum of the school have not been geared towards developing students' critical thinking skills (Dores, S.Pd., M.Pd et al., 2020).

Critical thinking is one of the skills needed to keep pace with rapid changes in the 21st century. Critical thinking is the process of considering ideas or concepts logically related to a particular issue or problem. Critical thinking can also be understood as the process of analyzing, classifying, selecting, understanding, reviewing, and developing ideas or concepts optimally [5]. The development of critical thinking skills is achieved by improving the quality of learning in the classroom to develop students' critical thinking skills. Education should actively involve students in the learning process, not just teachers who provide ideas.

Teachers must be careful in choosing learning models and designing learning programs and strategies, so that the learning they do becomes interesting, actual, and functional learning for students. The choice of learning methods by teachers has a very essential impact on student learning acquisition. Learning methods that tend to be teacher-centered and do not actively involve students in the teaching and learning process, make it difficult for students to develop critical, creative, and innovative thinking skills. To overcome this problem, a more innovative and effective learning model is needed, which is able to improve students' thinking skills [6].

Learning model *contextual teaching and learning* (CTL) is effective in developing students' critical thinking skills. This model emphasizes student-centered learning, which actively engages students in the teaching and learning process. This model encourages students to explore and build their knowledge through real-life experiences. This is in line with the definition *U.S Department of Education Office of Vocational and Adult Education* about learning for adult and vocational education, which defines it as a concept that helps educators connect the curriculum to real-life situations. This model also encourages students to make connections and apply knowledge in their own lives as community members, citizens, and potential workers [7].

The use of learning media is also important to improve the quality of learning. Interactive and engaging learning media can increase students' motivation and help them understand complex concepts. Videos are an effective teaching tool because they allow information to be presented visually and audioly, making it easier for students to understand it [8]. According to Cheppy Riyana, learning video media is a media that presents audio and visual that conveys educational messages, including concepts, principles, processes, theories, and applications of knowledge that contribute to understanding. Learning videos are a means to communicate knowledge and can be used as part of the learning process [9].

In the context of social studies (Social Sciences) subjects, critical thinking and analytical skills are important to understand the various social, cultural, and economic phenomena that occur in society. The application of the learning-teaching (CTL) model on video media is expected to improve students' thinking skills in social studies subjects [8].

Based on previous research, it is known that the improvement of students' critical thinking skills has been widely studied through various learning models, such as the application of Education for Sustainable Development (ESD**)** [10], Problem Based Learning (PBL) [11], as well as models Group Investigation [12]. However, these studies still have limitations because most of them have not specifically examined the application of the model Contextual Teaching and Learning (CTL) combined with media video in the form of Classroom Action Research (PTK)**,** especially in the subject Social Sciences (IPS) at the level Junior High School (SMP)**.**

In addition, some previous studies have been conducted more on other subjects such as mathematics and social studies, and have not emphasized the use of video media as a contextual means to relate the material to students' real lives. In fact, CTL learning emphasizes the importance of connecting subject matter with real-world contexts so that students can build meaningful

understanding [13], while video media has the advantage of presenting audio-visual information so that it can increase students' attention and understanding in learning [14]. Therefore, this research is important to be carried out as an effort to fill the research gap, namely the lack of studies on the application of the model CTL is video-based to improve students' critical thinking skills in social studies subjects grade VIII junior high school.

The development and implementation of the CTL teaching model using video media in Indonesian schools is an important step in improving the quality of education [15]. This learning model is expected to help students develop critical, creative, and innovative thinking skills, so that they can become the next generation of quality and able to answer the challenges of the times.

The pre-proposal observation on October 29, 2024 at SMP Negeri 2 Pamekasan that there were still problems in the classroom during the learning process. This is shown by the average critical thinking ability test results of 12.06 with only 40% of students achieving completeness [16]. Students with higher cognitive levels have difficulty solving problems, and some of them are less active in the learning process. Even when the teacher asks a question, some students are hesitant to express their opinion because they don't know how to connect understanding with problem-solving, thus losing the confidence to express themselves. One of the reasons why students don't fully understand the topic is because many study and memorize the material without understanding it.

The learning process in the classroom is still *teacher centered* (Teacher-centered) Students receive too much information from teachers, so students' critical thinking skills are still not developed [17]. This makes it difficult for them to meet the graduation requirements. Some questions that teachers ask students, such as those in the study book from school, namely the independent curriculum social studies book, can be found. High-level comprehensive questions are required to analyze students' thinking. The criteria for critical thinking are at the C4–C6 level [1]. Given the importance of critical thinking in improving students' academic achievement, research is needed to measure students' critical thinking levels [12].

Therefore, based on the problems mentioned by the researcher above, the researcher conducted a study on "Application of *Contextual Theaching and Learning* (CTL) Learning Model with Video Media to Improve Critical Thinking Skills in Social Studies Subjects Class VIII-A at SMPN 2 Pamekasan".

2. Method

This study uses the Kemmis & McTaggart model Class Action Research (PTK) approach which is carried out in two cycles. Each cycle consists of four stages, namely planning, implementation of actions, observation, and reflection [18]. This research was conducted at SMP Negeri 2 Pamekasan on 33 students in class VIII-A. The main objective of this study is to improve students' critical thinking skills through the application of the Contextual Teaching and Learning (CTL) learning model with video media. In its implementation, researchers play the role of teachers, observers, data collectors, as well as analysts of the results of the actions taken.

This research was conducted at SMP Negeri 2 Pamekasan on 33 students in class VIII-A. The main objective of this study is to improve students' critical thinking skills through the application of the Contextual Teaching and Learning (CTL) learning model with video media. In its implementation, researchers play the role of teachers, observers, data collectors, as well as analysts of action results. The data collection instruments used in this study include observation, tests, and documentation. The test used consisted of an initial test in the form of an oral test of 5 questions before the action was taken, and the final test in cycle I and cycle II using a written test in the form of description/essay questions and group assignments with the same type of questions in each cycle. The assessment technique of the critical thinking ability test is carried out using rubrics based on critical thinking indicators according to Facione, namely interpretation, analysis, evaluation, and inference [19], with a score range of 1–5 (score 5 is excellent until score 1 fails with a score of 1–5 (5 = excellent, 4 = good, 3 = adequate, 2 = poor, 1 = fail). The data from the observation of teacher and student activities was analyzed using the percentage formula[20]:

$$Percentage = \frac{Score\ obtained}{Maximum\ Score} \times 100\%$$

Furthermore, the results of the percentage of teacher and student activities are categorized based on intervals, namely 81.25 < X ≤ 100 (very good), 71.50 < X ≤ 81.25 (good), 62.50 < X ≤ 71.50 (good enough), 43.75 < X ≤ 62.50 (poor), and 0 < X ≤ 43.75 (not good). The assessment of the results of the students' critical thinking ability test is calculated using the formula[21]:

$$Score = \frac{Total\ Score}{Maximum\ Score} \times 100\%$$

Meanwhile, the category of students' critical thinking ability was determined based on the percentage, namely 81.25 < X ≤ 100 (very high), 71.50 < X ≤ 81.25 (high), 62.50 < X ≤ 71.50 (medium), 43.75 < X ≤ 62.50 (low), and 0 < X ≤ 43.75 (very low). The criteria for research success are set if at least 75% of students have reached the critical thinking category according to the specified indicators, which is characterized by an increase in observation and test results from cycle I to cycle II. Thus, this research is expected to make a real contribution to improving the quality of social studies learning and students' critical thinking skills through the application of the video-based CTL model.

3. Results and Discussion

This Class Action Research (PTK) was carried out at SMPN 2 Pamekasan in students in grade VIII-A with a total of 33 students. This research aims to improve students' critical thinking skills through the application of the Contextual Teaching and Learning (CTL) learning model assisted by video media. The critical thinking ability indicator used refers to Facione which includes interpretation, analysis, evaluation, and inference. The results of the research were obtained through observation of teacher activities, observation of student activities, and critical thinking skills tests at the preliminary stage, cycle I, and cycle II.

At the preliminary stage, students' critical thinking skills are still low, shown by the lack of student participation in discussions, lack of courage to express opinions, and students' dependence on package books when answering questions. The results of the observation of teachers' activities in the pre-cycle obtained a score of 30 with a percentage of 60% (poor category), while student activities obtained a score of 27 with a percentage of 60% (poor category). The results of the pre-cycle test showed an average score of 72.88 with a classical completion percentage of 52%. The data shows that most students have not reached the learning success criteria, so corrective action is needed through the implementation of video-based CTL.

Table 1. Results of Observation of Pre-Cycle Teacher Activities

	Activities to observe	Score
1	Regular prayer activities	3
2	Convey purpose and motivation	3
3	Classical questions related to videos	3
4	Presenting materials on equitable development	4
5	Classical questions related to videos	3
6	Clarify issues with video responses	3
7	Forming a study group	2
8	Explain the working instructions for the group discussion	3
9	Opportunity to ask questions	2
10	Assessment of student work results	3
11	Appreciation of students performing	4
12	Summarizing the learning material	3
Quantity		30
Percentage		60%
Category		Not Good

Table 2. Results of Observation of Precycle Student Activities

	Student Activities	Score
1	Regular prayer activities	3
2	Listening to learning objectives	4
3	Listen to the material	4
4	Ask about videos	3
5	Clarify issues with video responses	3
6	Forming a study group	2
7	Listen to the discussion work instructions	3
8	Ask for material	2
9	Summarizing the learning material	3
Quantity		27
Percentage		60%
Category		Not Good

Table 3. Pre-Cycle Test Results

Remarks	Score
Total Value	2.405
Average	72,88
Classical Completeness Percentage	52%

The implementation of actions in cycle I was carried out by applying the Contextual Teaching and Learning (CTL) learning model assisted by video media. The teacher relates the material to the students' real lives, then shows videos that are relevant to the social studies learning material. After that, students are divided into several groups to discuss the content of the video and answer the questions that have been prepared.

Student activities in the first cycle began to show an increase compared to the preliminary stage. Some students have dared to express their opinions in group discussions, although there are still some students who are passive. The interaction between teachers and students is also starting to be well established, although it is not completely optimal.

Figure 1. The Excitement of Listening to the Teacher's Explanation in Cycle I (source of his personal collection, 2025)

Figure 2. Group Discussion Activities in Cycle I (source of his personal collection, 2025)

Figure 3. Presentation Activities of Group Discussion Results *in Cycle I* (source of his personal collection, 2025)

The results of teacher activities increased to 75% (good category), while student activity increased to 64.44% (good category). The results of the first cycle test also increased with an average score of 77.58 and classical completeness of 67%. Although the increase occurred, the results of reflection showed that student participation was still uneven because some students were still passive in discussions and lacked confidence in expressing their opinions.

Table 4. Results of Observation of Teacher Activities Cycle 1

No	Teacher Activities	Score
1	Regular prayer activities	4
2	Check student attendance	4
3	Convey purpose and motivation	5
4	Delivering materials & media	4
5	Forming a study group	4
6	Assigning the LKPD	4
7	Guiding the completion of LKPD	3
8	Opportunity to present the results of the discussion	3
9	Rewarding	4
10	Opportunity to ask questions	3
11	Assessment of student work results	4
12	Summarizing the learning material	3
Quantity		42
Percentage		75%
Category		Good

Table 5. Results of Observation of Student Activities Cycle 1

No	Student Activities	Score
1	Regular prayer activities	4
2	Listening to purpose & motivation	4
3	Listening to materials and media	4
4	Forming a study group	2
5	Doing questions at LKPD	2
6	Guided to complete LKPD	4
7	Collect work	3
8	Appreciated	3
9	Summarizing the learning material	2
Quantity		29
Percentage		64,44%
Category		Pretty Good

Table 6. Cycle 1 Test Results

Remarks	Score
Total Value	2.560
Average	77,58
Classical Completeness Percentage	67%

The implementation of actions in cycle II is an improvement from cycle I. Teachers provide clearer directions in discussion activities and provide stimulus in the form of triggering questions that encourage students to think more deeply. The use of video media is also maximized to help students understand the material more concretely.

Student activities in cycle II increased significantly. Students look more confident in expressing opinions, actively asking questions, and being able to work together effectively in groups. The learning atmosphere became more conducive and participatory than the previous cycle.

Figure 4. The Excitement of Listening to Teachers' Explanations in Cycle II (source of his personal collection, 2025)

Figure 5. Group Discussion Activities in Cycle II (source of his personal collection, 2025)

Figure 6. Presentation Activities of Group Discussion Results in Cycle II (source of his personal collection, 2025)

The results show a significant improvement. Teacher activity reached 98% (excellent category) and student activity increased to 91% (excellent category). The results of the second cycle test also increased with an average score of 81.81 and classical completeness of 85%. These results show that the indicators of research success have been achieved, so the research was stopped in cycle II

Table 7. Results of Observation of Teacher Activities Cycle 2

No	Teacher Activities	Score
1	Regular prayer activities	5
2	Check student attendance	5
3	Convey purpose and motivation	5
4	Delivering materials & media	5

5	Forming a study group	4
6	Setting up the LKPD	5
7	Guiding students to work on LKPD	5
8	Opportunity to ask questions	5
9	Giving appreciation	5
10	Summarizing the learning material	5
Quantity		49
Percentage		98%
Category		Excellent

Table 8. Results of Observation of Student Activities Cycle 2

No	Teacher Activities	Score
1	Regular prayer activities	5
2	Check student attendance	5
3	Convey purpose and motivation	5
4	Delivering materials & media	5
5	Forming a study group	4
6	Setting up the LKPD	5
7	Guiding students to work on LKPD	5
8	Opportunity to ask questions	5
9	Giving appreciation	5
10	Summarizing the learning material	5
Quantity		49
Percentage		98%
Category		Excellent

Table 9. Cycle 2 Test Results

Remarks	Score
Total Value	2.700
Average	81,81
Classical Completeness Percentage	85%

Based on these results, it can be concluded that the application of video-assisted CTL provides an increase in students' critical thinking skills as seen from the percentage of classical completeness which increased from 52% in the first cycle, to 67% in the first cycle, and increased again to 85% in the second cycle which is then outlined in the following graphic visualization.

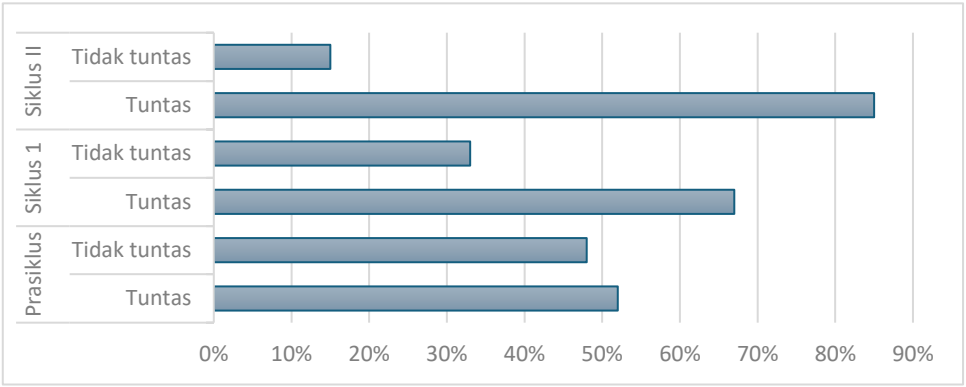

Figure 7. Diagram of students' critical thinking skills in the pre-cycle, cycle I, and cycle II

This increase is also followed by an increase in teacher and student activity which shows that the learning process is increasingly effective and participatory. Increasing students' critical thinking skills through the application of video-assisted CTL occurs because CTL places students as active subjects who build understanding through meaningful learning experiences. In CTL, students do not only passively receive information, but also relate the learning material to the real situation around them. When students are faced with the problem of equitable development through videos and triggering questions, they are encouraged to interpret information (interpretation), unravel the causes of problems (analysis), consider impacts and solutions (evaluation), and conclude arguments (inferences). These four aspects are in accordance with the critical thinking indicators put forward by Facione. Thus, CTL is effective because it is able to facilitate a high-level thinking process through problem-based learning and contextual experiences [19].

The use of video media in this study is a strengthening factor that clarifies the learning context. Videos provide visual and audio representations of the reality of equitable development so that students can understand social phenomena more concretely than just reading textbooks [22]. Social phenomena such as the development of the IKN, equitable development, and their impact on society will be easier to analyze when students see real visual evidence. This makes social studies learning more relevant to students' daily lives, thereby increasing their attention, curiosity, and involvement in discussions. Through videos, students not only remember information, but also learn to critically assess social problems based on the data and situations they observe [23].

Pedagogically, video-based CTL works through several learning mechanisms. First, the video serves as an initial stimulus that builds the orientation of the problem, so that students have material to think and discuss. Second, group discussions and LKPD encourage students to organize the information obtained from the video into logical arguments. Third, presentation and question and answer activities strengthen critical communication skills, as students not only express opinions but also have to defend arguments in front of their peers. Fourth, reflection at the end of learning provides an opportunity for students to re-evaluate their understanding. This mechanism makes learning more meaningful because students learn through social experiences and interactions, in accordance with the characteristics of social studies that emphasize understanding of social phenomena.

The results of this study are in line with the opinion [24] which states that teachers in CTL learning play the role of facilitators who guide students to actively ask questions, discuss, and express opinions. In this study, the increase in student activity from the "poor" category in the pre-cycle to "very good" in the second cycle showed that CTL was able to increase student involvement in the learning process. These findings also support the opinion of Hulaimi (2019) who states that CTL can strengthen conceptual understanding because students discover knowledge through relevant learning experiences. This can be seen from a significant increase in classical completeness to reach 85% in cycle II.

When compared critically with previous research, this study has a more specific contribution because it integrates CTL with video media in social studies learning, not just CTL in general. Some previous studies have emphasized CTL as a contextual approach without reinforcing a real visual stimulus [22]. In this study, video serves as a medium that strengthens the context so that students can analyze social phenomena in more depth. In addition, the study also shows that video-based learning can help students who were previously passive become more active, as they have "real material" to discuss. Thus, this study clarifies that the effectiveness of CTL is stronger when supported by media that is in accordance with the character of social studies material, namely material that requires concrete illustration of social life.

The implications of this research on social science learning are quite clear, namely that social studies learning will be more effective if teachers use strategies that not only explain concepts, but also present social reality through relevant media. The material on equitable development, regional inequality, and national development is abstract material if only explained in text, but becomes easier to understand if visualized through videos. Social studies learning is also not enough to require students to memorize, but must encourage students to assess social phenomena, understand cause and effect, and develop solutions. Therefore, the application of video-based CTL can be used as an alternative learning strategy to improve students' critical thinking skills while improving the overall quality of social studies learning.

Thus, the improvement of students' critical thinking skills in this study did not only occur due to repetitive actions in PTK, but also because of a change in learning patterns from passive to active through contextual experiences reinforced by videos. This proves that CTL + video is effective because it is able to create meaningful learning, increase student participation, and encourage high-level thinking skills according to critical thinking indicators.

4. Conclusion

The application of the Contextual Teaching and Learning (CTL) learning model assisted by video media has been proven to improve the critical thinking skills of students in grade VIII-A SMPN 2 Pamekasan in social studies subjects. This increase was seen consistently from the pre-cycle stage to cycle II. Classical completeness, which was originally at 52%, increased to 67% in cycle I and reached 85% in cycle II. This increase shows a change in the quality of students' thinking processes, especially in the aspects of interpretation, analysis, evaluation, and inference according to Facione's indicators. In addition to the increase in test results, changes also occurred in learning

activities. Teacher activity increased from the poor to very good category, and student activity increased from the poor category to very good in cycle II. The data shows that learning becomes more participatory and interactive after the implementation of video-based CTL. Students no longer only receive information, but are involved in the process of observing, discussing, analyzing, and deducing social phenomena presented through video media. Pedagogically, the integration of CTL and video media encourages contextual and meaningful learning. Video serves as a stimulus that clarifies social realities, while the CTL stage facilitates a high-level thinking process through discussion, presentation, and reflection. Thus, the improvement of critical thinking skills in this study occurred through changes in learning interaction patterns that are more active, contextual, and experience-based.

5. Suggestion

The Contextual Teaching and Learning (CTL) model supported by video-based media can serve as an alternative instructional strategy in social studies education, particularly for topics related to social phenomena and real-life contexts, as the use of contextually relevant videos enables students to engage with issues more concretely while stimulating in-depth discussion; this approach can be systematically implemented through the design of structured discussion activities, problem-based student worksheets, and guiding questions that promote analysis and evaluation, alongside strengthening the reflection phase to foster students' ability to synthesize and critically assess information, and it may also be extended to other educational levels and subject areas requiring higher-order thinking skills, thereby ensuring that learning is oriented not only toward content mastery but also toward the development of analytical and argumentative competencies.

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