



# Contextual Learning Models in Improving Elementary School Critical Thinking Skills

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**Abstract:** This study aims to find out how contextual learning models improve critical thinking skills in elementary schools. The method used in this study is a literature study. The data collection technique was carried out by reviewing the articles obtained with the help of the Publish Or Perish (POP) Software. The reviewed articles are used to answer the questions of this research. From the results of the research conducted, it shows that contextual learning models can improve critical thinking skills. This is because the contextual learning model applies direct involvement of students in the learning process and links it to the daily lives of students and emphasizes the ability of students to solve problems, analyze and make decisions.

**Keywords:** Critical thinking; Contextual learning models; Literature review

## Introduction

Education is one of the determinants of the quality of human resources which has implications for the progress of a nation (Agus et al., 2019). Education is also a conscious and systematic effort to create a learning environment that encourages the learning process of a student when learning takes place and to be able to optimally improve the talents and abilities of each student, so that they can become useful human beings for themselves, society, nation and country (Susilawati, 2022). Education is a container that will produce quality individuals. Education in the 21st century allows students to be capable of creativity, critical thinking, collaboration and communication (Badjeber & Purwaningrum, 2018). Critical thinking or critical thinking skills are indeed a challenge in the development of 21st century education, one of which is in the learning process at the elementary school level.

Critical thinking or critical thinking skills are becoming a hot issue in education that must be applied to the learning process. Critical thinking is one of the problems that must be solved to support superior and

quality students. In the learning process students do not directly carry out learning activities which include observing, asking questions, gathering information, associating or analyzing, and communicating what has been found in analytical activities (Kusumawati & Sulistyningrum et al., 2021). Further findings stated by Lombardi & Mednick et al., (2022) that in the learning process students are not sufficiently guided on how to evaluate, process, and critically reflect on information, because their teachers have deficiencies in terms of knowledge, education, and training in developing students' critical thinking skills. Students are also not yet terlatin in terms of analyzing, doing problem solving and are immature in making a decision (Putriningtyas et al., 2022).

Students who have the ability to think critically will certainly go in the right direction or the most appropriate answer in dealing with solving a problem (Ariani et al., 2020). The ability to think critically is where students are able to evaluate, provide an assessment of an idea, idea, problem or existing information, and then students are able to formulate and be able to make a decision (Ilhamdi et al., 2020). An individual who has

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critical thinking will make him more careful or alert in obtaining information, rejecting, and statements from the environment around him. This critical thinking can certainly be trained in the learning process by emphasizing the involvement of students directly in connecting their knowledge to the real world context of everyday life.

The ability to think critically is an ability that must be possessed by elementary school students. Elementary school learning emphasizes critical thinking skills, having critical thinking allows students to analyze their thinking in making choices and drawing conclusions intelligently (Anas et al., 2020). Elementary school students who enter the concrete operational stage, the cognitive development of students begins to be marked by the beginning of their thinking logically. At this stage students can only think based on the facts they see and still have difficulty dealing with abstract problems and the possibilities of human knowledge (Asdar & Barus, 2023). Students at this stage can solve problems logically, but they cannot think abstractly or hypothetically (Agustyaningrum et al., 2022). As for a model that can be applied by emphasizing the involvement of students in the learning process which will have an impact on their thinking skills, namely the contextual learning model.

The contextual learning model is a learning process that aims to help students learn material by connecting the subjects they study with the context of everyday life (Syaifuddin et al., 2021). The contextual learning model will take students to acquire their own knowledge and connect it to the real world context of students to be able to solve a problem or problem they face. Contextual learning allows students to find relationships between the material they are learning and real life (Anggraini & Ulfa, 2022). The contextual learning model is of course a learning model that fits the characteristics of elementary school students.

Based on the explanation above, this article will discuss contextual learning models in improving students' critical thinking skills at the elementary school level by examining several articles that have been analyzed. The question in this article is "can contextual learning models improve elementary school critical thinking skills?"

## Method

The method used in the article is the study literature method, which examines articles and books related to the topic to be studied. Literature study is a step in analyzing references originating from articles and books which will then relate to existing problems (Yeni & Hartati, 2020). Literature review is a means for researchers to obtain a theoretical basis for research

conducted by previous researchers which will then become a source of hypothesis guidelines (Satrianingrum et al., 2021). The articles reviewed in the research were obtained with the help of Publish Or Perish (POP) Software.

POP software is a software designed to help individuals and academics to find sources or analyze the resources needed. This is in line with opinion Aulianto et al. (2019), which states that POP is an application designed to help academics (individuals) to present the impact of research even if it has few citations. Next, the researcher groups the articles and examines whether the contextual model can improve critical thinking skills. Thus, 6 articles were obtained as a reference in this study.

## Result and Discussion

### *Contextual Learning Model*

The contextual learning model is a learning concept that helps teachers relate the material taught to students' real-world situations and encourages students to make connections between the knowledge they have and its application in their daily lives (Santoso, 2022). The contextual learning model is where students acquire knowledge little by little, and as a provision for solving problems in their lives (Muhsam & Letasado et al., 2021).

Contextual learning places great emphasis on the direct involvement of students both physically and mentally. Contextual model learning helps students in the right way to relate to their academic lessons, and is able to relate these lessons to the real world context of students' daily lives (Johnson, 2002). It can be interpreted that contextual model learning can provide new experiences that stimulate the brain to make new relationships, thus helping them find new meanings.

Further explanation of the contextual learning model was put forward by Rahmawati et al. (2018), states that in learning students are involved in activities that help students to associate material with the real world life they face. Both of these will help students in terms of compiling, selecting, organizing, planning, investigating, seeking information and drawing conclusions from the activities carried out.

There are seven components in the contextual learning model according to Johnson (2002), namely: constructivism, questioning, inquiry, learning community, modeling, reflection) and authentic assessment. Rusman (2012) describes seven principles of contextual learning that must be developed by teachers, namely: constructivism, finding, inquiry, community learning, modeling, reflection and actual assessment.

Then the contextual learning model has several syntaxes, namely: student orientation to problems, grouping students for learning, guiding to investigate

problems, developing and presenting work results, analyzing problem solving and evaluating it (Syaifuddin et al., 2021). The advantages in the application of contextual learning models, namely: learning focuses on the real world context of students, higher-level thinking, requires students to be active, creative and critical, prioritizes learning experiences, knowledge is more meaningful (Sulfemi et al., 2019).

#### *Characteristics of Elementary School Students*

The characteristics of elementary school students are at the stage of concrete operational/late childhood development with an age range of six to twelve years. At this stage students tend to have characteristics, which include: happy to play, group work and fun learning (Mahesti & Koeswanti, 2021; Mahfud & Fahrizqi, 2020; Hijriati, 2021; Wati, 2021).

The implications for teaching at the concrete operational stage are: encouraging students to find concepts, inviting students to work in groups and exchanging opinions, creating material that stimulates students to ask questions, using models or props as a focus of attention and involving students in assignments. operational (Santröck, 2007).

#### *Critical Thinking Ability*

Critical thinking ability is the ability to analyze and evaluate information, reasoning and situations, according to appropriate standards, for the purpose of building knowledge, understanding, hypotheses and new beliefs that make sense and are broad-minded. Critical thinking includes the subject's ability to process and synthesize information in such a way as to enable them to apply it wisely to tasks for sound decision making and effective problem solving (Heard et al., 2020).

Critical thinking is the ability and willingness to make judgments about a number of statements and make objective decisions based on sound considerations and supporting facts (Wade, 2007). Critical thinking makes students able to doubt things constructively so that students can analyze what is being faced and help make better and more informed decisions about whether something is right, effective or productive (Cottrell, 2017).

The indicators in critical thinking skills, namely the skills to analyze, evaluate and create are based on the theory described in the revision of Bloom's Taxonomy (Linda & Lestari et al., 2019). Meanwhile according to Wade (2007) there are eight indicators of critical thinking skills, namely: activities of formulating statements, limiting problems, testing data, analyzing various opinions and biases, avoiding highly emotional considerations, avoiding oversimplification, considering various interpretations, and tolerating ambiguity.

There are eight indicators of students' critical thinking skills, namely: identifying questions, putting forward hypotheses, determining an action, considering the use of appropriate procedures, recording observations, interpreting questions, identifying and handling irrelevant sources/data, and providing definitions (Susilawati et al., 2020). These indicators can be selected as a reference in measuring students' abilities as a result of their learning process.

#### *The Importance of Contextual Learning Models Can Improve Critical Thinking Skills*

Teachers can use learning models, one of which is the contextual learning model in the learning process in class to train and improve students' critical thinking skills (Shanti et al., 2018). This is in line with research Tantu (2018), field notes show that by using the contextual learning model students experience an increase in critical thinking skills in this case students are getting used to identifying, predicting, explaining cause-and-effect relationships, and drawing conclusions. Contextual model learning involves students in their learning to construct their own knowledge. Furthermore, the results of interviews with students showed that students felt helped by questions or instructions from the teacher who directed students to predict, explain causal relationships, so that they could draw conclusions properly.

Similar research was carried out by Yusup et al. (2022) nature measures students' critical thinking skills and scores are obtained in the experimental class with an average pretest score of 58.60 and a posttest score of 70.67 with a difference of 12.07 with a magnitude of 20.59%. Meanwhile, in the control class the average pretest score was 55.47 and the posttest score was 67.00 with a difference of 11.53 with a size of 20.78%. In this study the experimental class and the control class experienced an increase. However, in the experimental class using contextual learning models it is greater than the control class.

Research conducted Juniwati & Sari (2019) in improving critical thinking skills, namely the cognitive domain in terms of observing, formulating various patterns of choice and generalizing, formulating conclusions on patterns that have been developed, and evaluating conclusions based on facts. From the field test results, the results showed that the experimental class had a high category from 30% to 90%, and the control class increased from 25% to 85% and based on the results of the data analysis test, the results in the experimental class obtained a percentage of 95%, while control class 55%. This study shows that the results of students' critical thinking skills are influenced by the right learning model and how learning makes students free to explore the information needed. From the results of the

data analysis test conducted, it shows that the contextual learning model is more effective in improving students' thinking skills.

Research conducted by (Hendra, 2016) describes that learning components with contextual learning models can improve students' high-level thinking skills. Because in these characteristics there is an inquiry component that becomes an intermediary in applying critical thinking skills. Further research was carried out Amalia & Wilujeng (2018) based on an analysis of the calculation of the effect size of 1.07, it is included in the very high effect. It can be interpreted that the contextual learning model has a positive influence on students' critical thinking skills.

Based on the results of the research above, learning using contextual models provides great opportunities in students' thinking skills. The contextual learning model is a learning concept that assists teachers in associating material in students' daily lives and encourages students to make connections between the knowledge they already have and apply it in everyday life both as family members and in society.

The contextual learning model directs students to find as much knowledge as possible in making observations or experiences related to the real-world context of students, so that their critical thinking skills increase higher, as well as with the contextual learning model emphasizing their ability to think at a high level, knowledge transfer, production of information and data from various sources that are related to the lives of real-world contexts of students.

## Conclusion

Based on the literature study that has been carried out in this study, a conclusion can be drawn that contextual learning models can improve students' abilities. The contextual learning model is a learning process that involves students in building their knowledge and linking it to their daily lives. The contextual learning model teaches that students can ask questions, discover, carry out self-regulated learning, work together so that they are able to have critical thinking.

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## Author Contributions

Conceptualization, Ningrum; methodology, Ningrum.; data curation, Ningrum; original writing of the preparatory draft, Ningrum; review and editing, Ningrum; supervision, Ningrum and Murti.

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## Conflicts of Interest

The author declares no conflict of interest.

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