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# The Urgency of Critical Thinking Character for Elementry Student

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#### Abstract

Critical thinking competence for students is crucial throughout the learning process in the classroom so that students are accustomed to using reasoning systems to solve problems faced by students. This study aims to explain how to improve the ability to think critically in elementary school students. This research uses library research. The method used in research is literature study. Several stages in literature study research are data collection, reduction, presentation, and conclusion. There are many ways to improve critical abilities in elementary schools, including fostering and growing critical thinking in every lesson. Critical thinking skills can be started by conditioning the learning atmosphere by asking each other questions, discussing an object, and analyzing the material to be discussed. So, student's critical thinking skills are also influenced by learning styles at school, starting from the teacher's teaching methods and style, facilities, and student feedback on the lessons being taught.

Keywords: Character; Critical Thinking; Elementary School Student.

#### Abstrak

Urgensi Karakter Berpikir Kritis Bagi Siswa Sekolah Dasar. Kompetensi berpikir kritis bagi siswa sangat penting dilakukan melalui proses pembelajaran di kelas sehingga siswa terbiasa menggunakan sistem bernalar untuk memecahkan masalah yang dihadapi siswa. Tujuan penelitian ini yaitu menjelaskan cara meningkatkan kemampun berpikir kritis pada siswa sekolah dasar. Penelitian yang ini menggunakan penelitian kepustakaan. Metode yang digunakan dalam penelitian adalah studi pustaka. Beberapa tahapan dalam penelitian studi pustaka yaitu pengumpulan data, reduksi data, penyajian data, dan penarikan kesimpulan. Upaya cara untuk meningkatkan kemampuan kritis sekolah dasar, salah satunya dengan memupuk dan menumbuhkan pemikiran kritis pada setiap pembelajaran. Kemampuan berpikir kritis dapat dimulai dengan mengkondisikan suasana pembelajaran dengan memberikan pertanyaan atau saling bertanya jawab, mendiskusikan sebuah objek, dan menganalisis tentang materi yang akan dibahas. Jadi, kemampuan berfikir kritis siswa juga dipengaruhi oleh gaya belajar di sekolah, mulai dari metode dan gaya mengajar guru, fasilitas, dan umpan balik siswa terhadap pelajaran yang diajarkan.

Kata kunci: Berpikir Kritis; Karakter; Siswa Sekolah Dasar.

#### A. Introduction

There are several competencies that students must have in facing challenges in 21st-century education which are cited in The Partnership for 21st-Century Skills as follows: (1) students are expected to be able to reason effectively; (2) students can use systems thinking; (3) students can make judgments and decisions; and (4) students can solve problems (Zubaidah, 2016). The statement above shows that critical thinking competence for students is crucial throughout the learning process in the classroom. Students are accustomed to using reasoning systems to solve problems faced by students.

Critical thinking is one of the metacognitive processes such as conducting problem analysis, evaluating, and being productive (Muhali, 2018). In addition, critical thinking is a very important student ability to be developed so that students can compete in the future and have a stake in socializing. The ability to think critically in elementary school students is something that (Wahyuni et.al, 2022)students must be developed (Firdausi et.al, 2021). Critical thinking skills will train students to examine, analyze and evaluate information or opinions before accepting or rejecting that information. So that learning in schools should teach students to explore abilities and skills in finding,

processing, and assessing various information critically (Hidayati, 2017). However, Indonesian students' critical thinking skills are still low and require increased critical thinking through learning (Sulistiani & Masrukan, 2017) (Fristadi & Bharata, 2015). The results of Ni Putu's research prove that fifth-grade students at Dwijendra Elementary School, Denpasar's critical thinking skills are still low. His research shows that the percentage of the average value of students' necessary thinking skills is 15.39% of 61.53% (Wahyuni et.al, 2022). Lilis' research also proves that the critical thinking skills of class VIII A students at SMPN 1 Delanggu, Klaten Regency, for the 2016/2017 academic year, totalling 29 students, are still low (Nuryanti et.al, 2018).

Several studies have shown that when students can maximize critical thinking, students can make decisions and evaluate complex situations or problems (Setiawan, 2015). Critical thinking is deep reflective thinking in decision-making and problem-solving to analyze situations, evaluate arguments, and draw appropriate conclusions. Students who can think critically are students who can conclude what is known with relevant information (Stobaugh, 2013). The problem is that students still need to maximize their critical thinking. Students generally still have an indifferent nature and do not want to know.

The current orientation of students is only on values or results rather than processes. Therefore, learning models are needed that can improve students' critical thinking. With critical thinking, students can find solutions to problems that often occur. People who can think critically are able to conclude something they know, know how to use the information to solve problems and find relevant sources of information to support problem-solving. (Sapitri et.al, 2022). Critical thinking ability is the ability to analyze based on logical reasoning. In principle, people who can think critically don't just accept or reject something. They will examine, analyze and evaluate before determining whether they get or leave information (Susanti, 2019).

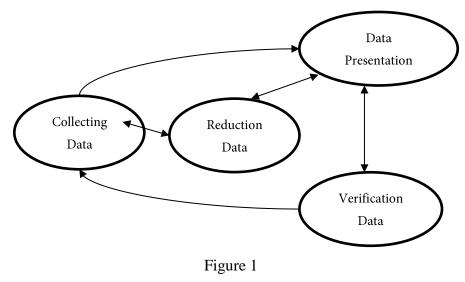
The characteristics of critical thinking skills are as follows: 1) recognize problems 2) find ways to deal with problems 3) collect and compile information 4) recognize assumptions and unstated values 5) understand and use precise, clear, and distinctive language 6) evaluate facts and evaluate statements 7) recognize a logical connection 8) draw conclusions 9) test one's similarities and conclusions are drawn 10) rearrange one's belief patterns based on more experience (Susanti, 2019). According to Susanti, the teacher's accuracy in choosing a learning model also influences the increase in students' critical thinking skills. However, this still requires further studies on effective learning models for improving critical thinking skills in elementary school students.

Similar research was also conducted by Magdalena, who concluded that the critical thinking skills of grade VI students at Cipete 2 Elementary School could be developed using discussion and the availability of adequate teaching material facilities. (Magdalena et.al, 2020). The research was also conducted by Haeruman, who stated that students need to have critical thinking skills to understand science subject matter, not only to understand the subject matter. By thinking critically, students can think deeply in decision-making and problem solving to analyze situations, evaluate arguments, and draw the correct conclusions (Haeruman et.al, 2017). This research differs from previous studies because this research focuses on teaching or improving critical thinking skills in elementary school students. Based on the above background, the researchers conducted a literature review on improving elementary school students critical thinking skills.

#### **B.** Discussion

#### 1. Research Method

Research is carried out using library research, so the method used in research is literature study. Mendes stated that the library research process was carried out by reviewing the literature and analyzing relevant topics that the teacher combined with the student (Mendes **et.al**, 2020).



Interactive model data analysis flow Reference: Miles dan Huberman (Ridder, 2014)

Literature search can utilize journals, books, dictionaries, documents, magazines and other sources without conducting field research. After collecting several journals related to critical thinking skills in elementary school students, then analyzing the data using descriptive qualitative analysis through literature study, the results of the analysis are in the form of descriptive data in the form of written sentences and the consequences of research conducted by previous researchers. Reviewing Miles & Huberman, there are several stages in literature study research: data collection, data reduction, data presentation, and drawing conclusions (Ridder, 2014).

#### 2. Definition of Critical Thinking Ability

Stobaugh defines critical thinking as the ability to provide answers that are not rote. (Stobaugh, 2013). Eggen and Kauchak mention that critical thinking is the ability and tendency to make and conduct assessments of conclusions based on evidence. (Eggen & Kauchak, 2020). Rainbolt and Dwyer state that critical thinking is the skill of correctly evaluating the arguments made by others and making good and correct arguments yourself. (Rainbolt & Dwyer, 2014).

Furthermore, according to Santrock, critical thinking includes reflective, productive, and evaluative thinking about an event (Griggs et.al, 1998). Based on the opinions of the experts above, critical thinking is a skill that must be possessed by students in providing answers based on reflective, productive and evaluative evidence of an incident. Someone can think critically if they have specific characteristics. Critical thinking includes determining the meaning and importance of what is seen or stated, evaluating arguments, and considering whether conclusions are drawn based on sufficient supporting evidence. Critical thinking is not the same as arguing or criticizing others. The word "critical" to an argument is not synonymous with "disagree" with an argument or other people's views. Critical judgment may be made of a good argument because critical thinking is neutral, impartial and unemotional.

Critical thinking is a universally valuable skill for all professions and types of work. Critical analysis can increase understanding of a problem. Analytical, discriminatory, and rational thinking helps to select helpful alternative solutions and eliminate useless ones. Reflective and independent thinking can avoid attachment to wrong beliefs, thereby minimizing the risk of making bad decisions based on these mistaken beliefs.

Critical thinking is also helpful for expressing ideas. Critical thinking has an important role in assessing the benefits of new ideas, choosing the best ideas, and

modifying them if necessary so that they help do jobs that require creativity. There are three conditions needed to have critical thinking skills (Rohman, 2022):

- a. Attitude to use deep thinking in looking at a problem by using experience and existing evidence
- b. Knowledge of methods to ask questions and reason logically
- c. Skills to apply the method

## 3. Characteristics of Critical Thinking

There are several characteristics of a person who is said to have a critical thinker. Lau mentions a critical thinker if someone can do: (1) understand the logical relationship between ideas; (2) formulate ideas briefly and precisely; (3) identify, construct, and evaluate arguments; (4) evaluate the pros and cons of a decision; (5) evaluate evidence and hypotheses; (6) detect inconsistencies and common errors in reasoning; (7) analyze problems systematically; (8) identify the relevance and importance of ideas; (9) assess one's beliefs and values; and (10) evaluating one's thinking ability (Lau, 2011).

A critical thinker can not only be seen from his characteristics but also from his attitude. Lau explained that critical thinkers should have the following attitudes: (1) think independently (freely); (2) be open-minded; (3) be level-headed; (4) be fair, objective and impartial; and (5) be analytical and reflective (Lau, 2011). Meanwhile, according to Eggen and Kauchak that a critical thinker has the following attitudes: (1) the desire to obtain information and seek evidence; (2) an open-minded attitude and healthy scepticism; (3) a tendency to delay judgment; (4) respect for the opinions of others; (5) tolerance for ambiguity (Eggen & Kauchak, 2020). Based on the statement above, the attitude of a critical thinker has an open-minded tendency to make decisions on a problem so that decisions are taken based on evidence.

Critical thinking can occur when a person decides or solves a problem. When someone considers whether to believe or not to believe, to do or not to do an action, or to consider acting with solid reasons and studies, he is using critical thinking. A critical thinker will review whether the beliefs and knowledge that other people have or put forward are logical or not. Likewise, a person who thinks critically will not just swallow the conclusions or hypotheses put forward by himself or others. A critical thinker has some characteristics as follows:

a. Raising important questions and issues, formulating them clearly and thoroughly.

- b. Come up with useful and relevant new ideas to do the task. Critical thinking is important in assessing the merits of new ideas, selecting the best ideas, or modifying ideas if necessary.
- c. Collect and assess relevant information, using abstract ideas to interpret it effectively.
- d. Draw conclusions and solutions with sound reasons and solid evidence, and test them against relevant criteria and standards.
- e. Think openly by using various alternative systems of thought while recognizing, assessing, and looking for relationships between all assumptions, implications, practical consequences
- f. Able to overcome confusion, able to distinguish between facts, theories, opinions, and beliefs
- g. Communicating effectively with others to find solutions to complex problems without being swayed by other people's thoughts on the topic in question
- h. Be honest with yourself, resist manipulation, hold scientific credibility and integrity, and be intellectually independent, impartial, neutral

#### 4. The Urgency of Critical Thinking Character of Elementary School Students

Critical thinking is one of the abilities that every child needs to develop. Critical thinking is a method written by the Greek philosopher Socrates, whose name is the Socratic Method. This method became one of the earliest tools of critical thinking instruction known to man. Some practices say the benefits of critical thinking have been applied for thousands of years. Importance of critical thinking skills is the most significant for the development of children's way of thinking, namely

a. Critical thinking can encourage curiosity

Children with practical critical thinking are curious about various topics and generally have multiple interests. He maintains a curiosity about the world and people and understands and appreciates the cultures, beliefs, and worldviews that are shared qualities of humanity.

In addition, critical thinking makes children lifelong learners. Because critical thinkers are naturally curious, opportunities to apply skills are always around the child. He is always open to opportunities to use his habits of thought in any situation. The desire to think critically about even the simplest problems and tasks indicates a willingness for constructive results. In encouraging curiosity, children with critical thinking skills often ask related questions, such as;

What happened? What do I see?

Why is this important? Who is affected by this?

Where do these come from? What is hidden, and why is it important?

Who said this? Why should I listen to this person? What can they teach me?

What if?

Why not?

Critical thinkers don't take anything for granted, either. He never stops asking questions and enjoys exploring all sides of an issue and more profound facts hidden in all the data.

b. It increases creativity

The most important skill children need to develop outside of school is nurturing student creativity, which is crucial. Creativity is number two, right below problem-solving. Undoubtedly, influential critical thinkers are, for the most part, creative thinkers. Creative children question assumptions about many things.

Children may often ask "how" or "why not". Creativity is eternal and has unlimited potential, meaning children are not limited to creative people. The invention applies to students of all ages and children who like to think critically and are never afraid to leave their creative comfort zone.

c. Strengthen problem-solving abilities

Children who think critically tend to be problem solvers instinctively. This is the most important skill that parents can help their children from an early age. Today's children are tomorrow's leaders and will face complex challenges that require using their critical thinking capacities to engineer imaginative solutions. One of the most prolific essential thinkers of history, Albert Einstein, once said the following;

"It's not that I'm that smart; it's just that I stick with problems longer."

Einstein's thinking is given one hour to solve a problem. He would likely spend 5 minutes on the solution and another 55 minutes defining and researching the issue. Thus, patience and commitment to understanding the problem is the hallmark of a true critical thinker. That is why developing necessary thinking skills in children is very important to become an effective problem solvers. As these challenges are constantly changing and growing as the world around them changes, the best minds are needed to solve them, and children must be prepared to think critically and differently to come up with innovative and lasting solutions.

d. Critical thinking drives a lot of development in children

Critical thinking is becoming popular because it covers various disciplines and fosters cognitive talents. Creative thinking is a cross-curricular activity for the mind and must be exercised like a muscle to stay healthy.

e. Critical thinking develops a sense of independence

In addition to the various things above, critical thinking also makes school-aged children start to think independently. Independent thinking skills are at the forefront of learning how to become a great thinker and a great leader. These skills teach children how to make sense of the world based on personal experiences and observations and to make sound critical decisions similarly.

Thus, the child gains confidence and the ability to learn from mistakes while building a successful and productive life in the future. When we think critically, children believe in a self-directed way. Thus disciplined thinking becomes a self-correcting mindset.

## 5. How to Teach Critical Thinking Character to Elementary School Students

Critical thinking skills are the ability to weigh important and unimportant, concrete and abstract factors that affect a situation to make the best solution to a problem. Based on the results of cognitive psychology research, educators believe that educational institutions need to focus on teaching students critical thinking skills and cultivating their intellectual qualities. As with other ways of understanding the subject, learning to think critically involves two phases: (1) internalization; and (2) application. The internalization phase includes constructing basic ideas, principles, and critical thinking theories in students' minds. The application phase consists of using students' concepts, principles, and theories in everyday life.

Teachers need to cultivate and grow critical thinking at every stage of learning, starting from early education. Critical thinking skills can be started by conditioning the learning atmosphere by asking or asking each other questions, discussing an object, and analyzing the material to be discussed. The learning model influences the critical thinking skills of elementary students. However, the problem-based learning model is more effective in increasing critical thinking skills than problem-solving (Sari et.al, 2017). There are various effective learning methods for improving critical thinking skills in elementary school students. Learning models and teaching methods are very important in the learning process so that interactions between teachers and students become active so that learning activities do not look stiff and boring (Susanti, 2019). Indicators of critical thinking skills include formulating problems, analyzing arguments, asking and answering questions, making observations and assessing reports of observations, evaluating, deciding and implementing, and interacting with others (Sapitri et.al, 2022).

There are several obstacles in developing students' critical thinking, including the making of instruments which are hampered due to other professional teacher tasks, the assessment of students' critical thinking skills not being held, lack of student interest, lack of motivation to learn, and lack of communication between teachers and parents students, lack of reciprocity between teachers and students during learning, conditions, and situations that are less controlled, inadequate facilities in learning so that learning is less than optimal.

Several factors can influence students' critical thinking skills. The main factor is a physical condition. Students who are unhealthy or lack enthusiasm for learning will interfere with concentration when learning takes place, which can result in disrupted critical thinking. The second is motivation. Students who need more motivation from teachers and parents will also hamper the learning process. The last is the interaction between teachers and students. The existence of interaction in a lesson will make the learning atmosphere more fun and good because the feedback is very influential for the development of students' critical thinking. Students' critical thinking skills will develop more quickly if the ability development is supported by the efforts made, especially by teachers and students.

Creativity, independence, and students' critical thinking skills are grown through assignments that students work on individually or in groups as part of an integrated student learning experience. These assignments must be by individual characteristics and each subject. Fourth, various approaches and methods must be used to achieve active, creative, effective, and enjoyable learning.

So, in this way, students' critical thinking skills are also influenced by learning styles at school, starting from the teacher's teaching methods and style, facilities, and student feedback on the lessons being taught.

### C. Conclusion

Critical thinking is an ability that students must have to provide answers based on. Someone can be able to think critically if they have specific characteristics. A critical thinker will review whether the beliefs and knowledge that other people have or put forward are logical or not. Critical thinking skills are the ability to weigh important and unimportant, concrete and abstract factors that affect a situation to solve a problem best. Teachers need to cultivate and grow critical thinking at every stage of learning, starting from early education. Critical thinking skills can be started by conditioning the learning atmosphere by asking each other questions, discussing an object, and analyzing the material to be discussed. There are various effective learning methods for improving critical thinking skills in elementary school students. Learning models and teaching methods are very important in the learning process so that the interaction between teachers and students becomes active so that learning activities look smooth and exciting. Indicators of critical thinking skills include formulating problems, analyzing arguments, asking and answering questions, making observations and assessing reports of observations, evaluating, deciding and implementing, and interacting with others. So, in this way, students' critical thinking skills are also influenced by learning styles at school, starting from the teacher's teaching methods and style, facilities, and student feedback on the lessons being taught.

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