



INQUIRY LEARNING STRATEGIES ON STUDENTS' CRITICAL THINKING ABILITIES IN PRIMARY SCHOOLS

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Abstract

This research was conducted to define inquiry learning strategies for students' critical thinking abilities in elementary schools. This research is motivated by a learning system that is still teacher-centered, learning appears inflexible, causing students to be less active in learning. The inquiry learning strategy is a learning strategy that places students as learning subjects and students are given the opportunity to carry out activities such as observing, investigating and conducting experiments by emphasizing students' critical thinking processes to find answers to the questions they ask with or without the help of the teacher. This research data collection used a literary study method (*library research*) where the literature review aims to strengthen the analysis from the various sources used. Data collection for this research was carried out by browsing articles in reputable online journals using Google Scholar and documentation in the library.

Keywords : Inquiry Learning Strategy, Critical Thinking Ability

Introduction

So far, the learning process in schools, especially elementary schools, is more often carried out passively, meaning the teacher explains the material and the students listen. Even though the active learning approach has been seriously pioneered with a project known as the Supervision Project and CBSA (Active Student Learning Method). The results were then replicated in a number of regions starting at the elementary school level so that they were gradually integrated into the 1984 Curriculum, 1994 Curriculum, 2004 KBK and 2006 KTSP (Ministry of National Education, 2010:1). The reality that occurs during implementation in the field. Based on the Internal Report, the assessment of elementary schools in Ternate by World Vision in Indonesia shows that there are several factors that hinder active learning, such as schools that are unwilling to innovate. In general, the "sitting, listening, taking notes and memorizing" method still applies and teachers are less creative and not trained to carry out active learning. (Ministry of National Education, 2010: 3). To overcome these problems, one of the things that needs to be implemented is a learning strategy design, which is one element of the four main elements of a learning strategy design, namely material design (content design), competency design/learning objectives/learning outcomes (competency learning objectives design), method design. /learning strategies/techniques (instructional strategies design) and evaluation design. Learning strategy design must be contextualized with competency design, material design and fair evaluation design (Munthe, 2009:56). The term strategy was originally defined as the art of generals to lead troops to win in war (Siti Nurhasanah et al, 2019). In general, strategy is an outline of the direction of action to achieve a predetermined goal. If related to learning activities, it can be interpreted as a general pattern of activities carried out by teachers and students as a manifestation of teaching and learning activities to achieve predetermined goals (Inah, 2015). Sumandya & Widana (2021) stated that learning strategy is the method chosen to convey material in the learning environment including the nature, scope and learning activities that provide learning experiences to students. The solution to educational problems in the current era is to implement an independent curriculum. The emergence of their curriculum is aimed at answering current educational problems,

namely improving students' critical thinking skills, communication skills, collaboration skills, and applying them in everyday life (Manalu et al, 2022).

The implementation of teaching and learning activities in the independent curriculum is not only carried out in the classroom, but can also be carried out outside the classroom (Mardani et al, 2023). Learning outside the classroom (outdoor study) is an effort to invite students to observe the environment or surrounding community in accordance with the material being studied, learning will be based on students' experiences while outside the classroom (Yanti et al, 2022). The inquiry learning strategy is a form of student-oriented learning approach. Fitriani & Haryani (2016) stated that the advantage of using the inquiry learning strategy is that it stimulates and motivates students' desire to know and find answers so that students learn to find problems independently by having critical thinking skills. Based on the explanation above, this research aims to describe the application of inquiry learning strategies in integrated thematic learning in elementary schools. It is hoped that this writing will provide benefits as a reference for teachers in learning, especially those related to the application of inquiry learning strategies in integrated thematic learning in elementary schools. The learning process in the 2013 curriculum uses integrated thematic learning. Integrated thematic learning is integrated learning that combines several learning contents using themes as a unifier between subjects so that learning is more meaningful. According to Desyandri & Vernanda (2017) integrated thematic learning is learning that uses themes to link several subjects so as to provide meaningful learning for students. Meanwhile, according to Taufik (2015) integrated thematic learning is a learning approach that links various subjects into themes. The world of education in Indonesia is never free from various problems. In fact, it is not uncommon that after one problem is solved, new problems will arise. This has an impact on basic education which needs improvement. Efforts to improve the quality of education at the basic education level need to be carried out in a sustainable and integrated manner. The fundamental problem is students' thinking abilities. Many educators believe that education today narrows students' horizons, because it does not help students to think critically and creatively.

The current problem is preventing students from thinking critically and creatively, namely that there are still many teachers who rarely use learning strategies that are in line with curriculum objectives and more often use simple or conventional learning. The problems faced are not only problems with the teacher himself but also with the students' thinking processes. This must be the responsibility of a teacher on how to direct students to think creatively and critically effectively. Student learning outcomes cannot fail to be obtained through the learning process carried out (Wadji 2021). The low student learning outcomes indicate that the experience developed at school is still weak, as is the case in choosing the right learning system with learning materials. In developing experience, a system is needed that is ready to help student learning outcomes so that it really influences students in honing the possibilities that exist in real students (Afdal, Subakti and Sigalingging 2020). Looking at the picture above, it becomes increasingly evident that educational experiences must appear imaginative, significant and focused on students. Furthermore, students can understand and obtain new information based on what is understood by educators and influence learning outcomes and improve students' abilities both in the mental, emotional and psychomotor aspects of students (Hapsari, Sumantri and Astra 2019). In the learning process that occurs, some students are bored so they are not interested in following the science learning sequence due to the lack of use of strategies implemented by the teacher during the teaching and learning process. Learning that takes place is more focused on *teacher centered* and learning becomes monotonous. This is what becomes the benchmark so that students are less able to develop a desire to learn and make their learning results not meet expectations. Teachers should make more efforts to make learning more interesting and *student centered*. Based on the explanation above, it can be concluded that inclusive learning strategies can influence students' critical thinking abilities in elementary schools. Critical thinking is an important skill for successful learning and the low critical thinking ability of students is caused by the choice of learning models that are less varied and not adapted to student characteristics. Inquiry is an example of a learning strategy that includes steps aimed at searching, analyzing and arguing in a critical way and leading to a conclusion.

Research Methodology

This research uses a literature study method (*library research*) where the literature review aims to strengthen the analysis from the various sources used. The meaning of literature study in this writing is as a basis for forming an initial writing plan and as a source of writing data. Literature study is research conducted based on written works, such as research results that have been published or not. This research data was collected by searching for articles in reputable online journals using Google Scholar and documentation in the library. The keywords used by researchers in searching articles are "Inquiry Learning Strategy". The results obtained from this writing will be studied again and analyzed using content analysis, then summarized and presented in a research report.

Result & Discussion

The results of research data regarding this literature study were analyzed and summarized based on the main topics related to inquiry learning strategies and students' critical thinking abilities in elementary schools. The results of scientific article data are summarized in Table 1 and Table 2.

Table 1. Inquiry Learning Strategy

Researcher	Title	Research result
Mesyta Putri Ayu and Taufina Taufik	Application of Inquiry Learning Strategies in Integrated Thematic Learning in Class IV Elementary School (Literature Study)	The inquiry learning strategy is a series of learning activities that emphasize students' critical thinking and analysis processes to be able to search for and find answers to a problem. The aim of the inquiry learning strategy is to help students develop thinking skills so that in the learning process students discover for themselves the essence of the lesson material.
Roni Rodiyana	The Influence of Implementing Inquiry Learning Strategies on Students' Critical and Creative Thinking Abilities in Elementary Schools	Inquiry learning strategies on students' critical and creative thinking abilities have a very significant influence where with inquiry learning strategies students are required to think deeply to a confident level, able to produce a large number of ideas or solutions to problems in a short time, able to simultaneously proposes various approaches to certain problems, is able to produce new things and is able to systematize and organize the details of ideas in the head and bring them out.
Andra Rista Virliana and Reinita	Improving Integrated Thematic Learning Outcomes Using Inquiry Strategies in Elementary Schools	The research results showed that in the first cycle of RPP, 79.16% (C) increased in the second cycle to 94.44% (SB). Implementation of learning in cycle I teacher activities was 76.56% (C), increasing in cycle II to 87.5% (B). Implementation of learning in student activities in cycle I was 78.52% (C), increasing in cycle II to 90.82% (SB). Thus, research using inquiry learning strategies can improve integrated thematic learning outcomes in elementary schools.

Table.2 Critical Thinking Ability

Researcher	Title	Research result
Hani Nur Azizah, et al	The Influence of the Guided Inquiry Learning Model on Students' Critical Thinking Ability in Sound Energy Material	The guided inquiry learning model can significantly improve students' critical thinking skills on sound energy material, so that students are given the opportunity to first suspect things that will happen, prove the assumptions put forward through group experimental activities, and communicate the results of experiments with each other. obtained by each group and solving problems by deciding on the results of experiments that are relevant to the problem posed, resulting in students' critical thinking abilities increasing.
Bilqis Waritsa Firdausi, et al	Improving Critical Thinking Abilities in Elementary School Students	Critical thinking skills begin to be trained and developed starting from grades IV and V of elementary school. Developing critical thinking skills can be done through learning model interventions such as <i>problem based learning</i> , <i>project based learning</i> , <i>problem posing</i> , and <i>discovery learning</i> .
Mohammad Liwa Ilhamdi	The Influence of the Guided Inquiry Learning Model on Critical Thinking Abilities in Science in Elementary Schools	Based on data analysis and discussions carried out in class V of SDN 37 Cakranegara academic year 2019/2020, the results of the hypothesis test $\text{calculated } t \text{ value } 8.323 > t_{\text{table}} 0.265$, at a significance level of 5% it can be concluded that science learning on material objects and changes in the properties of objects uses The guided inquiry learning model influences students' critical thinking abilities.

Based on the results of data analysis in the table above, and reinforced by journals and several theories, it can be concluded that inquiry learning strategies are effectively implemented in determining students' critical thinking abilities in elementary schools.

Conclusion

Inquiry learning strategies for students' critical thinking skills in elementary schools can improve critical thinking skills which can influence students' learning success. The inquiry approach can help students understand and analyze information critically, examine ideas and solve problems in achieving learning goals and the inquiry learning strategy is able to produce a large number of ideas or solutions to problems in a short time, simultaneously being able to propose various approaches to certain problems and producing new things and original ideas.

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