

Teacher's Strategy in Building Students' Critical Thinking Competence through Reading Skills in Elementary Schools

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Abstract:

This study aims to examine the elementary school teachers' strategy in developing critical thinking skills for grade IV-A students of SDN Simpar, Poncokusumo, Malang Regency, through reading skills using an integrated thematic approach. This research uses qualitative methods with phenomenological research. This study explores information in the form of phenomena or events that are scientific and correct presented in qualitative data. Research data are obtained through a triangulation process consisting of analysis of observation data, interviews and documentation of learning activities that refer to the research topic. Critical thinking competencies related to the ability to reason, express, analyze, and solve problems. Critical thinking competence is a must-have for students in the 21st century to prepare themselves to face global competition. This critical thinking competence can be built through reading skills. Teachers have a patterned and continuous developing strategy in instilling students' critical thinking skills in the form of skills in presenting problems, determining relevant information and making conclusions and solving problems in achieving learning objectives.

Keywords: Critical Thinking Skills, Reading Skills, Teacher Strategy

Introduction

Learning in the 21st century requires students to have 4C competencies, namely Communication, Collaboration, Critical Thinking and Problem Solving, also Creativity and Innovation. Critical thinking skills are competencies that must be built since the elementary school level¹. Many studies discussing students' critical thinking ability² found that students's skills are ranging from a very low to high level of critical thinking ability. This shows that many students, especially those in grade six, have very low critical thinking ability. The emergence of this very low category appears in the first indicator of critical thinking skills, namely when giving an explanation where the first sub-indicator is focusing questions. The ability to think critically in class VI students after carrying out reading comprehension activities is stated to be better in which they can reach a very high critical thinking category. The occurrence of high-level critical thinking skills in class VI students after reading comprehension activities is indicated by the percentage of critical thinking skills carried out by students after

¹ Vieira, R. M., & Tenreiro-Vieira, "Fostering Scientific Literacy and Critical Thinking in Elementary Science Education."

² Rahayu, E., & Hartono, "Keefektifan Model PBL Dan PjBL Ditinjau Dari Prestasi, Kemampuan Berpikir Kritis, Dan Motivasi Belajar Matematika Siswa SMP."

carrying out reading comprehension activities.³

The 2013 Curriculum as a form of revision and development of the previous curriculum aims to achieve character building based on student competence. The application of the 2013 Curriculum is accompanied by the right tools to achieve the goal in the form of a learning approach, namely an integrative thematic.⁴ Integrative thematic learning is an approach that integrates various competencies from various subjects into various themes. This integration is carried out in two ways, namely: integration of competence domains in learning (attitudes, knowledge and skills) and integration of various related basic concepts. The theme functions as a unifying tool for diverse material from various subjects. Thematic learning is interpreted as learning that is designed and packaged based on certain themes and discussions of various subjects.

A study discussing the implementation of literacy culture in improving students' reading, writing, and critical thinking skills⁵ explained that the literacy culture set in students makes a major contribution to the surrounding environment. This can help students improve the quality of learning and knowledge. The ability to provide excellent improvement is indicated by students being able to understand the meaning of words and also terms in a reading book, by demonstrating that students are able to retell stories after reading them. Students are also able to understand the main ideas or themes of the reading and can also summarize and convey the contents of the story they have read.⁶ In critical thinking skills with the presence of GLS students get an increase in critical thinking skills. This can be seen when students are able to focus and prepare themselves to read or read a story. Then also the ability to gather information and can improve critical thinking skills.

This is where the role of the teacher is presented as the key to learning. Teachers have a role in developing student creativity during the learning process.⁷ Examining this, the skill that is assessed as fundamental is critical thinking. The critical thinking ability of an individual becomes a strategic competence to face the globalization era which is full of challenges (mastery of technology and science) and uncertainty. In addition, the teacher has a role as a motivator/encouragement in developing attitudes and behavior to master competence.⁸ Critical thinking skills are fundamental and potential competencies in humans to think logically, dynamically and conceptually. Critical thinking is a complex thinking process to examine ideas systematically.⁹ The steps in critical thinking are grouped into three, namely: identifying/clarifying problems, assessing information (judging information), and

³ Culver, K. C., Braxton, J., & Pascarella, "Does Teaching Rigorously Really Enhance Undergraduates' Intellectual Development? The Relationship of Academic Rigor with Critical Thinking Skills and Lifelong Learning Motivations."

⁴ Fanani., "Strategi Pengembangan Soal Higher Order Thinking Skill (HOTS) Dalam Kurikulum 2013."

⁵ Mardina, "Literasi Digital Bagi Generasi Digital Natives."

⁶ Afolabi and Oladokun, Information Literacy Skills, Availability of Information Resources as Factors Influencing Research Productivity of Academic Staff of Lead City University, Nigeria.

⁷ Akturk and Ozturk, "Teachers' TPACK Levels and Students' Self-Efficacy as Predictors of Students' Academic Achievement."

⁸ Glynn, S. M., & Winter, "Contextual Teaching and Learning of Science in Elementary Schools."

⁹ Culver, K. C., Braxton, J., & Pascarella, "Does Teaching Rigorously Really Enhance Undergraduates' Intellectual Development? The Relationship of Academic Rigor with Critical Thinking Skills and Lifelong Learning Motivations."

solving problems or drawing conclusions (solving problems). In implementing critical thinking skills, students are able to critically accept and analyze knowledge, process information properly to reconstruct mindsets and make rational decisions in solving the problems they face. Critical thinking is an effort to deepen awareness and intelligence to compare several to produce conclusions in solving problems.

From the problems above, critical thinking skills obtained from reading activities are very effective to do. With reading comprehension activities students are able to think critically at a high level. It was also stated that reading comprehension activities can improve critical thinking skills better than before reading. The percentage obtained is also very high whereby reading will improve high-level critical thinking skills.

Research Methods

This study uses a qualitative method,¹⁰ because the purpose is to research and describe phenomena that occur in research subjects holistically in natural contexts and methods.¹¹ The sampling technique used by researchers is Purposive Sampling. Samples are selected and determined based on predetermined criteria according to research objectives so that teachers are selected who are considered to have been able to develop critical thinking skills in learning.¹² So the researchers carried out the research with a sample of Class-6 teachers at Simpar State Elementary School, Wringinanom Village, Poncokusumo District, Malang Regency, East Java. The implementation is that this study examines the teacher's role in developing critical thinking skills in thematic learning of fourth grade students at Simpar State Elementary School, Wringinanom Village, Poncokusumo District, Malang Regency, East Java, Indonesia. Researchers act as the main instrument¹³ or the key instrument.¹⁴ The research data were obtained from the process of observation, interviews and documentation in the field so that researchers used data analysis techniques Triangulation techniques according to the stage of data acquisition. Finally, the collected data were analyzed and reported in descriptive form.¹⁵

Result and Discussion

Learning in the 21st century requires every level of education to be able to provide 4C skills to their students. Communication is the ability to communicate in the forms of oral and written. Collaboration is the ability to work together and synergize with various parties and be able to be responsible for one own self, society and the environment. Critical thinking is related to the ability to reason, express, analyze, and solve problems. Creativity is the ability to produce something new.¹⁶

¹⁰ Rahardjo., "Triangulasi Dalam Penelitian Kualitatif."

¹¹ Owen, "Qualitative Methods in Higher Education Policy Analysis: Using Interviews and Document Analysis."

¹² Allwood, "The Distinction between Qualitative and Quantitative Research Methods Is Problematic."

¹³ Sofaer, "Qualitative Research Methods."

¹⁴ Hammarberg, K., Kirkman, M., & Lacey, "Qualitative Research Methods : When to Use Them and How to Judge Them."

¹⁵ Thanh, N. C., Thi, T., & Thanh, "The Interconnection Between Interpretivist Paradigm and Qualitative Methods in Education."

¹⁶ Miri, B., David, B. C., & Uri, "Purposely Teaching for the Promotion of Higher-Order Thinking Skills: A Case of Critical Thinking."

Education providers have a responsibility to be able to prepare their students to face the global world of work and also to produce a generation that is able to compete in the 21st century. Critical Thinking skills which are part of the 4C skills cannot simply be possessed by students. It must be trained and built since students in the elementary school level.¹⁷

Critical thinking skills can be interpreted as a person's ability to use logical reasoning when analyzing an idea.¹⁸ Critical thinking ability is also defined as an intellectual process carried out by conceptualizing, applying, synthesizing or evaluating information obtained from observation, experience, reflection, thinking or communication as a basis for believing in this information and then taking action.¹⁹ So, in simple terms, the ability to think critically can be interpreted as the ability to think rationally about the information obtained whether it can be trusted to be true and determine actions on the information obtained. Critical thinking skills must be built in students so that students are able to learn how to solve problems systematically, in an organized manner in dealing with challenges, are able to formulate questions innovatively, and compile solutions that are considered relatively new.

Students need to have the ability to think critically because it is useful for students when facing life in the present and the future. Therefore, critical thinking skills must be built early on in students starting from the elementary school level.²⁰ The development of critical thinking skills must be carried out by the teacher through daily learning activities so that students are accustomed to thinking critically. Building students' critical thinking skills can be done by sharpening students' reading skills.²¹ Reading is something that should be made a habit. By reading, students can understand and know various kinds of knowledge and information that they have never encountered and know and also train students to think critically about what they read. Some experts provide a definition of reading, mentioning the notion of reading is getting a message conveyed by a writer through a piece of writing.²² Reading is a process of managing information in a reading text and the relevant knowledge. Reading itself is a process that is carried out and used by readers to get a message conveyed by the author. Reading is an interactive activity to pick and understand the meaning in a text.

Teacher's Strategy in Developing Students' Skills in Identifying Problem

Learning begins with guiding students to observe images, text or media listed in the student book. The teacher accustoms students to have curiosity starting from an early age, aimed at stimulating students to read texts, observe pictures to try as the

¹⁷ For, I., Thinking, C., On, A., & Materials, "Based Assessment Instrument for Critical Thinking Ability on Berbasis Creative Problem Solving."

¹⁸ Vieira, R. M., & Tenreiro-Vieira, "Fostering Scientific Literacy and Critical Thinking in Elementary Science Education."

¹⁹ Culver, K. C., Braxton, J., & Pascarella, "Does Teaching Rigorously Really Enhance Undergraduates' Intellectual Development? The Relationship of Academic Rigor with Critical Thinking Skills and Lifelong Learning Motivations."

²⁰ Tseng, "Using Concept Mapping Activities to Enhance Students' Critical Thinking Skills at a High School in Taiwan."

²¹ Tseng.

²² Miri, B., David, B. C., & Uri, "Purposely Teaching for the Promotion of Higher-Order Thinking Skills: A Case of Critical Thinking."

application of a scientific (natural) approach. Learning always departs from the problem to be studied as a learning topic.²³ To find the problem being studied, teachers invite students to first observe the pictures in the book. Pictures serve to stimulate students' curiosity. This is supported by the imagination of students to quickly receive information from observing, so teachers should not limit children's imagination (Teacher interview, 2/2/2023). The teacher guides students to find the problems studied in each learning theme/topic by determining the main ideas/main ideas, keywords to underline each problem finding. The discovery of problems submitted by students

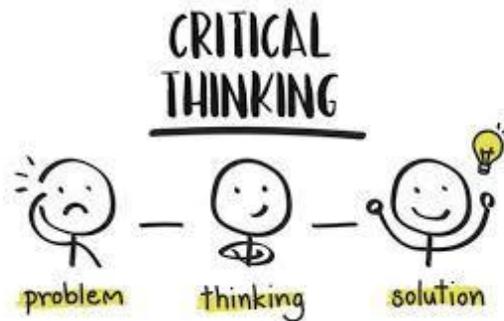


Figure Develop critical thinking skills in student

shows the ability to receive information through observing and reading. Teacher seeks to build students' skills in comparing each problem found by re-emphasizing and returning the problem to the concept repeatedly so that the right concepts are embedded without limiting students' creativity. Thematic learning presents learning that combines several subjects in the discussion of Core Competencies and Basic Competencies on an ongoing and related basis.

The teacher carries out learning by presenting problems through the media of images, reading text or teaching aids for the process of identifying problems during learning. After identifying the problem, the teacher asks students to analyze it by comparing the information found by each student.²⁴ The process of comparing is intended to see any differences in any findings from problems during learning. The actualization of critical thinking processes is reflected in the students' questioning process. The teacher stimulates students to ask questions by giving students the opportunity to ask questions based on the problems found. This stage shows students' skills in finding the problems discussed. Critical thinking is actually the ability to be responsive, children quickly respond to questions and problems (Teacher S, 4/3/2023). The teacher gives more treatment to certain students in the form of prioritizing opportunities and persuading students with the aim that all students dare to ask questions.

Teacher's Strategy in Developing Students' Skills in Assessing Relevant Information

The teacher guides students to be able to identify problems and then find and

²³ Miedijensky, S., Sasson, I., & Yehuda, "Teachers' Learning Communities for Developing High Order Thinking Skills—A Case Study of a School Pedagogical Change."

²⁴ Ihsan, M. S., Ramdani, A., & Hadisaputra, "Efektivitas Model Blended Learning Dalam Pembelajaran Kimia Untuk Meningkatkan Kemampuan Berpikir Kritis Peserta Didik."

determine information intended to answer/refer to the problems found.²⁵ Every problem is referred to the information contained in the pictures and reading text. Student activities explore and show information on learning media to analyze the truth, accuracy and relevance of information to the facts being studied. Students identify the accuracy/appropriateness of the information found by exploring the information contained in the learning media and then adjusting it to student findings. In expressing opinions, the teacher leads students to understand the contents of the reading text. To ensure this, the teacher asked where the information was written. So that students have reasons to raise their findings as important information. Then the teacher motivates students to dare to express their opinions.²⁶ The teacher provides opportunities for students to convey any information findings. The teacher asks students to observe and analyze any information conveyed so that students can assess the similarities and differences in the information conveyed by their friends.

Teacher's Strategy to Improve Students' Problem-Solving Skill

Teacher gave several questions aimed at seeing students' learning experiences. The teacher guides students to draw conclusions by connecting each important information finding. Students are directed to assemble all the findings into a sentence that summarizes all the contents of the paragraph called conclusion. The teacher is seen throwing this opportunity to students so that students conclude learning. The conclusion is written in one paragraph.²⁷ Conclusions are written using new vocabulary, reading and the students' own language without imitating the language in the reading text. According to the teacher, students should not use sentences like in books. So that students are required to develop the knowledge they have while studying according to their respective abilities which are then conveyed in written form. As stated in the Learning Implementation Plan (RPP) in Theme 4 Sub-theme 3 6th Learning it is stated that: "The teacher guides students to be able to conclude learning concepts using the students' own language". So the teacher gives students the opportunity to conclude learning using their own language/sentence according to the understanding they receive.

The findings above refer to the achievement of students' skills in critical thinking. Critical thinking skills have three stages of achievement in the learning process, namely: the problem identification stage, the information gathering stage, and the decision making stage. At the problem identification stage, the teacher starts learning by presenting problems through media images, reading text or teaching aids, then the teacher asks students to analyze by comparing information. Learning is done by presenting problems. Presenting problems according to the concept of problem-based learning is shown by the teacher's activity in presenting problems to become the focus of learning.²⁸ The teacher displays skills in presenting problems through media, student books or visual aids. Activities carried out by students in identifying problems include searching for key words and underlining important information.

²⁵ Hunter, P. E., & Botchwey, "Partnerships in Learning: A Collaborative Project between Higher Education Students and Elementary School Students."

²⁶ Thanh, N. C., Thi, T., & Thanh, "The Interconnection Between Interpretivist Paradigm and Qualitative Methods in Education."

²⁷ Miedijensky, S., Sasson, I., & Yehuda, "Teachers' Learning Communities for Developing High Order Thinking Skills—A Case Study of a School Pedagogical Change."

²⁸ Vieira, R. M., & Tenreiro-Vieira, "Fostering Scientific Literacy and Critical Thinking in Elementary Science Education."

After identifying the problem, students submit questions based on the problems found. At this stage, the teacher develops students' initial skills to recognize the problem being studied. What this teacher does is in line with directing critical thinking, namely the ability to analyze and evaluate information obtained from observation, experience, reasoning and communication to decide whether the information can be trusted so that it can provide rational and correct conclusions. For this reason, the teacher needs to provide problems and students analyze and evaluate these problems. The next stage is seen in the activities of students exploring and showing relevant information.

The teacher asks students to observe and analyze and assess the similarities and differences in the information conveyed. The teacher provides different facts to increase students' understanding with the skill of connecting facts to the concept of discussion. This activity is so that students are familiar with various exercises in the form of activities provided by the teacher through a series of facts. Lack of practice and activity in critical thinking is also the cause that students' critical thinking skills are low. So that in this study the teacher also presents information findings to the environment around students so that understanding of the problem can be applied in everyday life. Problem relevance activities show the teacher associates each problem discussed with students' daily lives. The problems studied are given a different description according to the environment around students. The teacher presents several different facts to be associated in a concept being studied. In addition, the teacher applies concrete learning and enriches students' conceptual understanding of the problems studied thereby increasing student understanding and developing students' skills in solving problems related to learning topics in everyday life.²⁹ Explains that learning must pay attention to students both paying attention to the conditions and needs of students, besides that learning must be supported by an effective learning environment for students so that it helps the student learning process.³⁰

Reflecting and drawing conclusions from the learning process is the final indicator of students' critical thinking skills. Reflection has a function as a benchmark for the success of learning activities by looking at students' understanding or development regarding learning material. The method used by the teacher is to provide opportunities for students to share learning experiences. The teacher invites students to tell stories by making a summary of experiences during learning and then conveying them. Testing conclusions means that teacher activities provide opportunities for students to convey problem findings for conclusions. The conclusions put forward by students require discussion/correction together so that students understand the information conveyed. This is to see the suitability and accuracy of the conclusions referring to the process and learning outcomes. So, students are able to see the right conclusions according to learning. After the reflection activity, the teacher gives students the opportunity to conclude learning using their own language/sentence according to the understanding they have received. This activity is intended to see student understanding and skills in communicating information on learning outcomes.

²⁹ Boyer, S. L., Edmondson, Artis, and Fleming, "Self-Directed Learning: A Tool for Lifelong Learning."

³⁰ Huang, Y. M., Liang, T. H., Su, Y. N., & Chen, "Empowering Personalized Learning with an Interactive E-Book Learning System for Elementary School Students."

The teacher carries out learning in a patterned manner starting with the process of presenting problems, associating problems with the environment around students (problem relevance) to testing the accuracy of conclusions as part of problem solving. Presenting problems requires skills in understanding concepts, exploring material and utilizing learning media. Learning media has an important role as a bridge for delivering information so that concrete learning is created in the classroom. Students tend to more easily receive information through the media and even understand concepts longer in students. Students use learning media, such as: student books, reference books in reading corners, newspapers etc. to find information related to the problems discussed, so they found information that become the conclusion of learning to answer the problems studied.

Conclusion

The description of research findings shows indicators of critical thinking skills, including: identifying problems, determining relevant information and drawing conclusions. The teacher develops critical thinking skills in a series of processes of observing, asking, reasoning, trying and communicating the achievement of learning objectives. The teacher implements patterned and repetitive learning strategies to develop students' critical thinking skills. The teacher begins learning by presenting problems to be identified using learning media, comparing the information found to see differences in student findings. The stage of determining relevant information is carried out by the teacher by asking students to explore and show information in learning media to assess the truth, accuracy and linkage of information to facts, analyze the similarities and differences in the information conveyed. Then the decision-making process as a problem-solving stage by making reflections and learning conclusions.

Based on the description above, the researcher found a teacher's strategy during learning to develop critical thinking skills which were carried out in a patterned or repeated manner. The teacher's strategy in developing students' critical thinking skills consists of: problem presenting skills, problem relevance skills and testing conclusions for problem solving. This learning strategy is carried out by the teacher in a patterned/repeated manner supported by the role of learning media to see the achievement of critical thinking skills. Critical thinking competence is the ability to use logical reasoning on the information obtained and to be able to take action on that information. Because critical thinking competencies will be useful for students in facing global competition in this technological age, it is necessary to have a strategy to build students' critical thinking competencies, one of the strategies that can be implemented is to improve students' reading skills. By frequently reading students will be able to think critically by raising probing questions, have open-mindedness, and also be able to make logical conclusions based on evidence. Teachers in elementary schools must be able to build students' reading skills through several types of reading according to elementary school age, namely intensive reading, scanning, comprehension, fast, beautiful, technical, and language. It is hoped that critical thinking competence will be possessed by students.

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