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Development of Problem-Based Learning Models to Improve Critical Thinking Skills in Citizenship Education Courses

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Abstract

This literature research aims to get answers, opinions or perceptions about the person, so the discussion must be thorough qualitatively or in words. The library research method is used as the research methodology in this study. data collection technology A number of relevant books, journals and documents should be viewed or researched. This study discusses the problem of developing problem-based learning models to improve critical thinking skills, namely how to develop problem-based learning models to improve students' critical thinking skills, so that students are able to express their opinions. The results showed that the use of problem-based learning models in the lecture process was able to improve students' critical thinking skills because of direct student involvement, students were able to work in groups, analyze problems, find solutions to existing problems and were able to draw conclusions from the topics discussed. The problem-based learning model is able to improve students' critical thinking skills, this is evident from the results of research from researchers who have carried out using problem-based learning models. Students are motivated in lectures and are able to develop their potential to improve critical thinking skills and have the competence to analyze a problem, be able to provide solutions and act intelligently in making decisions on problems encountered both during study and outside the campus environment.

Keywords: Problem Based Learning, Crictical Thinking

INTRODUCTION

The Education Paradigm that shifts from teacher centered to student centered has provided opportunities for more effective learning, meaningful experience gifts and equipping students with problem solving skills in line with the competencies that must be possessed in the present century. (Anggelaet., 2015) stated that the best learning process is to involve students in actively examining teaching materials. The use of lecture methods, memorization, presentation of material in textbooks is of course not sufficient to involve students actively in constructing a concept being studied, that is why the learning process should use alternatives in order to be able to provide equal opportunities for each student's abilities which are of course not the same as each other. & other. The way that can be taken is through case-based learning (problem-based learning), (Hardiyanti, 2017) states that problem-based learning (PBL) can encourage students to find solutions to problems that are given so that it can help improve students' self-ability, then (Yohan, 2019) argues that PBL is a way of composing and teaching a learning process using the issue as a stimulus and the focus is more on the activity of the student. Based on the opinion above, it can be seen that PBL is able to increase the attention, abilities and activities of students as a result of being able to construct knowledge into part of knowing a concept in learning.

Critical thinking skills are one of the ten basic skills that students need to prepare and develop in order to survive and succeed in the present and the future. Furthermore, from the output of the WEF questionnaire, approximately 37% of these skills are expected in the industry in the next fewyears. (www.weforum.org, 2019). National Council of Excellence in Critical Thinking (NCECT) on (Changwong, et.al. 2018) states "the process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication" Critical thinking is a skill for creating concepts, applying, analyzing, synthesizing, and evaluating information gathered through the output of observation, experience, reflection, reasoning, or communication. (Sianturi, et.al., 2018) Critical thinking is a mental way to analyze and evaluate news. Furthermore, (Alwasilah, 2010) states that critical thinking is used in mental activities such as solving cases, reaching decisions, analyzing estimates & conducting scientific research. In line with this, Freely in (Handayani, 2016) states that critical thinking can help students to analyze, criticize and present ideas, provide reasons for a case and draw conclusions.

The importance of teaching and developing critical intelligence must be scrutinized as something urgent and not to be underestimated. Mastery of critical intelligence is relatively used as an educational goal alone, but also a process that enables students to overcome the future. According to R. Ennis critical thinking is reasonable and reflective thinking that is serious to determine what should be considered or done (Fisher, 2008). Critical thinking is a process that must be carried out by a person to reach the right and wise output or decision by carrying out the process of exploring, recognizing, and assessing all related matters such as values, information and information, knowledge possessed and needed for consideration. on reaching a decision.

In relation to the quality of learning, especially learning outcomes, critical thinking skills can affect learning outcomes. Research by (Aini, 2013, 2017); (Komariyah&Laili, 2018) found that critical thinking skills affect student learning outcomes. In addition, the study results show that critical thinking skills also help students solve problems presented in the form of tests. (Koroh, T., & Ly, P, 2020). The Influence of Problem Based Learning Learning Model in Citizenship Education Learning on Critical Thinking Ability of National Integrity Material on Students' Critical Thinking Ability. there is a significant influence between the problem based learning (PBL) learning model and students' critical thinking skills.

Existing problems need to find a solution so that what is achieved in improving critical thinking skills can improve properly. One of the solutions offered in this problem is a problem-based learning model that accommodates critical thinking skills and places more emphasis on the ability to solve problems in civics courses. There is an increase in critical thinking skills after learning is carried out using the problem based learning model because this approach requires well-developed technical skills. (IntanBudiarti, 2019)

RESEARCH METHODS

This study used library research methodology (library research). Literature-based research, a form of research that uses literature as a research topic. There are several main characteristics that must be considered in the research method. Literature review, namely: First, the author directly deals with text/numeric data. Second, library materials are interpreted as another source of their interest, the authors receive information from other parties not original from the first party in the industry. Third, the information obtained is natural "ready". Fourth,

acceptance library materials are not limited in space and time (Zed, 2003). Data collection techniques from the study of several books, literature and other documents are considered according to the studies above.

RESULT AND DISCUSSION

Learning Model

The learning model is a strength or strategy carried out by educators during teaching and learning activities, said (Rusman, 2012). that "learning activities must be carried out by teachers and students so that learning objectives are achieved effectively and efficiently." Meanwhile, Dick and Carey said that "a learning strategy is a set of learning materials and methods used together to achieve student or student learning outcomes. Some experts express the opposite opinion about the learning model as follows.

(Joyce & Weil, 2009) argues like this "A learning model is a plan or model that can be used changing the curriculum (long-term curriculum), designing learning materials and guiding learning or something like that." A learning model can be used as a paradigm of choice, meaning that educators can choose a learning model that is appropriate and effective in achieving educational goals. In addition, Joyce, 2009) states that "learning models are plans or patterns that are used as a guide for planning learning in class or learning in tutorials to define learning tools including books, films, computers and more.

(Trianto, 2009) states that "learning models is a broad and thorough approach categorized based on learning objectives, syntax and features of the learning environment". Based on the definition above it can be concluded that the model learning is the foundation of learning for educators and a conceptual framework that implements systematic action and in that it has to do with the approach used, the steps involved in school activities, the learning environment and classroom management by organizing learning experiences to achieve goals to learn.

Problem Based Learning

This study uses Problem Based Learning (PBL) which is another term for Problem Based Learning which is a learning that begins by confronting students with a problem that exists in the real world and guiding them to be able to solve or solve the problem through learning activities or experiences. carried out during the learning process (Isrok'atun& Amelia, 2018). According to (Rusman, 2017) Problem-Based Learning is an innovation in learning because in Problem-Based Learning students' thinking abilities are really optimized through a systematic process of group or team work, so that students can empower, hone, test and develop their thinking skills on an ongoing basis.

The Problem Based Learning Model is a teaching method focus on real problem solving, the process by which students perform group work, feedback, discussions that can be stepping stones springboard for research and investigation and final report. With In this way, students are encouraged to be more actively involved in the subject. Sulaeha also explained the problem based learning (PBL) model. is a learning model that uses problems as the basis of student learning materials. Therefore, the role of the teacher In this learning model, his role is more as a leader and facilitator for students to learn to think and solve their own problems. (Sulaeha, et al., 2016).

The Problem Based Learning model is a learning model designed so that students receive important information. This makes them proficient in problem solving and personal responsibility. Independent learning and teamwork models.(As'ari et al., 2017). According to

(Paloloang, 2014) the problem-based learning model is a learning model that focuses on learning experiences that are regulated including questions and solve problems, especially problems related to life every day. The PBL model is a learning model which is a learning model that educates students to apply problem solving skills. (Putra, TomiTridaya et al., 2012).

The focus of problem based learning is on problems chosen so that students not only learn concepts, not only deal with problems but also scientific methods to solve these problems (Sianturi, Aprilita et al., 2018). The teacher's role The purpose of the problem-based learning model is to provide problems, ask students questions and help students in school activities. (Pratiwi, AlifahAnggun, et al, 2014). Several descriptions of the importance of problem-based learning can be concluded that "problem-based learning is a learning model that exposes students to real problems, starts learning and is one of the innovative learning models that can equip students with active learning conditions."

Critical Thinking

Thinking is one thing that distinguishes one human being from another. According to (Irdayanti, 2018) Thinking is the process of producing new mental representations through the transformation of information which involves complex interactions including reasoning activities, imagination, and problem solving. According to (Ahmadi, A &Supriyono, 2015) "Thinking is a "diaclectic" process meaning that as long as we think, our minds are in a question and answer state, to be able to put our knowledge relationship". In thinking we need a tool that is reason (ratio). (Santrock, 2013) "Thinking is manipulating or controlling and changing internal memory data". This is often done to form concepts, reason and critical thinking, make decisions, think creatively and solve problems. (Rahmawati, 2014). According to (Naila, 2016) Also in thinking includes suspicious and investigative functions, planning, calculating, measuring, evaluating, comparing, classifying, sorting or differentiating, combining, interpreting, looking at existing possibilities, analyzing arguments and synthesizing or draw conclusions from existing premises, weigh and decide only. (Febriani, 2015) Where a thinker can process and organize some of his knowledge, namely experience and knowledge that is not organized also becomes organized to be understood so in the mind connecting one meaning with other meanings sequentially finding solutions to the problems encountered. From the various definitions above, it can be concluded that what is meant is thinking, the mental activity that people experience when they meet in the problem or situation to be solved.

(Azizah et al., 2018) People who are gifted as critical thinkers are people who are able to reflect on what knowledge is, the ability to use information to solve problems and be able to find relevant sources of information such as problem solving support. People who know how to think critically are people who are able to conclude what they know, know how to use information to solve problems and are able to find relevant sources of information to support problem solving. (Rama, 2017). (Irdayanti: 2018) Critical thinking can be seen as a student's thinking ability to compare two or more information, for example information received from outside with information that is owned. According to (Wulandari, 2017) critical thinking is an individual's mental activity to make decisions in solving problems faced with various information that has been obtained through several categories. According to (Ratnaningtyas, 2016) "A person who thinks critically can be seen from how a person faces a problem." (Lestari's, 2016) critical thinking is a systematic thinking activity that allows a person to formulate and evaluate their own beliefs and opinions. So, someone in critical thinking uses reasonable thinking to decide what to do according to his intellectual abilities (Febriani, 2015). According to (Rifqiyana, 2015) when students think critically in mathematics, they make reasoned decisions or considerations about what they are doing and thinking.

(Ennis, 2011) The definition of critical thinking is "critical thinking rational, wise thinking that focuses on deciding what to do, believe or do". According to this definition, critical thinking emphasizes thinking rationally and wisely. This rational and reflected way of thinking is used to (Johnson, 2014) also explains that critical thinking is reasonable thinking and reasonable reflective thinking that focuses on deciding what to believe in or not to be closed off. (Irdayanti, 2015) states that critical thinking contains eight related components, namely (1) is a problem, (2) has goals, (3) data and facts, (4) theory, definition, axioms, arguments, (5) initial comparison , (6) comparative framework, (7) reconciliation and Conclusion and (8) Implications. Critical thinking skills are one of the basic capital or intellectual capital which is very important for everyone and it is an important part of human maturity. One of the goals of critical thinking. According to (Najla, 2016) is "can help students draw conclusions through reflection on regional information and facts. Based on several opinions. Based on the experts above, it can be concluded that critical thinking is a summary of what is known, knowing how to use information to solve problems and find sources of relevant information to support problem solving. Critical thinking is also considered a necessary ability designed to enhance the quality of what lies within you somebody.

Critical Thinking Indicator

(Wowo, 2016) Critical Thinking Indicator, as Consequence:
1) Identification of the focus of the problem, questions and conclusions, 2) Analysis of arguments, 3) Ask and answer clarifying or difficult questions, 4) Identify decision conditions and deal with them accordingly, 5) Observe and evaluate the observation report, 6) Summarizing and evaluating decisions, 7) Think of reasons without allowing disagreements, or doubts to cloud your mind.

This phase is divided into two indicators (1) predicting and (2) integrating the importance of indicators for critical thinking according to (Faccione, 2013), namely: 1) Interpretation, namely one's ability to understand and express the importance of situations, data, judgments, rules, procedures or other criteria, 2) Analysis, namely the ability of a person to explain conclusions based on the relationship between knowledge and concepts, problem with questions, 3) Evaluation, namely the ability to assess the credibility of expressing or representing someone's different opinion or assessing a conclusion based on the relationship between knowledge and concepts with in-depth questions of the problem, 4) Inference, namely the ability to distinguish the elements needed for a reasonable conclusion considering the information available, the essence and consequences of the existing data, 5) Explanation, namely the human ability to express himself in justifying the person's argument on the basis of evidence, concepts, methodology and logical criteria existing knowledge or information in which this reasoning is presented in the form of an argument, 6) Self-regulation, namely the ability that a person has to gain awareness to explore self-cognitive functions, the elements used in operations use analysis and evaluation skills alternately confirm, confirm and revise the results of the arguments presented previously

Table 1. Indicators of Critical Thinking Ability According to Ennis

Step	Critical Thinking Skills	Indicator
1	Elementary Clarification	1. Focusing Questions 2. Analyze Arguments 3. Ask and answer clarifying questions
2	Basic Support	4. Consider whether the source can be trusted or not 5. Observe and consider results observation
3	Inference	6. Making deductions and considering the results deduction 7. Make an introduction and consider the results induction 8. Make and consider value decisions

4	Advanced Clarification	9. Define terms and consider 10. Identify assumptions
5	Strategies and Tactics	11. Define Action 12. Interact with others

Source Ennis (2011)

CONCLUSION

Based on the results of literature review studies from several national and international journals, books and data sources that are considered relevant to research, it can be concluded that the problem-based learning model is an excellent model to use in civics education learning and can improve students' problem-solving skills. This can be seen from the many learning theories that support problem-based learning models and are successful in improving students' problem-solving skills

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