

The Role of Problem Solving, Problem-Based Learning, and Critical Thinking in the Era of Globalization

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Abstract

In the era of globalization one can obtain information in various ways, places and times. So that information obtained by someone can be effective and does not cause a negative impact, a "filter" is needed to filter every information received. One such filter is the critical thinking ability that a person has. With the ability to think critically someone will determine/ consider carefully and deliberately whether to accept, reject, or delay receiving information. In the world of education in the era of globalization, it requires more developing learning. The challenge of the era of globalization requires learning that is more developed in the ability of critical thinking, because the end of a learning that is obtained in school is to become human beings who are competent in answering various problems and challenges that are increasingly complex. Problem solving learning methods and problem based learning use a problem-based approach that can improve critical thinking skills. The analytical model used in the discussion of the main topics in this article uses the causal analysis of the intellectual model using a rational approach that is assembled based on the results of the literature review.

Keywords: problem solving, problem-based learning and critical thinking

1. INTRODUCTION

Globalization is a special phenomenon in human civilization that moves continuously in global society and is part of the process of human life. The presence of information technology and communication technology accelerates the acceleration of the globalization process. Globalization that happens touches all important aspects of life. Globalization creates new challenges and problems that must be answered, solved. An effort to utilize globalization for the benefit of life. Many people, all over the world, have always discussed globalization. In globalization, there is a definition of the loss of a situation where various movements of goods and services between countries throughout the world can move freely and openly. With the opening of one country to another, what happens is the entry of not only goods and services, but also technology, patterns of consumption, education, cultural values and others (Suneki, 2012).

Especially in the world of education, critical thinking competencies have enormous benefits and is needed in the global era, but in the implementation of education, especially in learning, competencies in critical thinking are rarely considered. As Fisher (2008) argues, learning so far only teaches about the content of the subject matter and overrides the teaching of thinking skills, so that some students do not understand the thinking skills being discussed. This is a contradiction with Ministerial Regulation number 22 of 2006

(Departemen Pendidikan Nasional, 2006) which mandates that one of the thinking skills that students should have through learning is critical thinking.

2. LITERATURE REVIEW

2.1 The concept of globalization

In globalization, there is a definition of the loss of a situation where various movements of goods and services between countries throughout the world can move freely and openly. With the opening of one country to another, what happens is that the entry of goods and services, but also technology, patterns of consumption, education, cultural values and others. The concept of globalization refers to the narrowing of the world in incentives and increasing our awareness of the world, namely the increasing global connection and our understanding of these connections. The process of narrowing the world can be understood in the context of the institution of modernity and the intensification of world consciousness can be perceived as reflexively better culturally.

Globalization is considered as a process where various events, decisions and activities in one part of the world can have important consequences for various individuals and communities in other parts of the world. The process of development of globalization was initially marked by the

advancement of information and communication technology. Which ultimately is the driver of globalization. From the progress of this field, then it affects other sectors in life, such as politics, economics, social, culture and others.

It is important for us to pay attention to the nature of the relationship between globalization and civilization. A strong and vibrant civilization can create and change globalization. On the other hand, globalization can leave positive and negative impacts on civilization. The dynamics of interaction between civilization and globalization need to be studied and understood in depth because the impact is not necessarily visible and felt instantly (Bakar, 2008).

2.2 The Concept of Critical Thinking

The strong current of globalization has led to competition in various fields of life including education. To face the tough challenges the importance of improving the quality of education. One effort to improve the quality of education is to improve quality human resources. Improving the quality of human resources is focused on critical thinking skills. This is an important agenda and vital issue in modern education in the era of globalization. In the 21st century critical thinking is one of several learning and innovation skills needed to prepare graduates of students who can compete in filling the job market (Rahma, 2012).

Garcia and Pintrich (Saeed and Rousta, 2013) put forward the critical thinking important implication for the transfer of knowledge and application of problem solving skills to novel situations. Based on this understanding it is emphasized that critical thinking is an active process, meaning to obtain information from other parties who tend to take it passively. Critical thinking is also seen as a strong and careful belief with the intention to contrast a person's thinking system that is ineffective or without involving comprehensive thinking.

Jufri (2013) explains that critical thinkers always go through several stages in their actions, namely formulating problems, giving arguments, making deductions, and making inductions, evaluating, then making decisions and determining actions. This stage has the same characteristics with the steps of solving problems according to Polya (1973), namely understanding the problem, planning a solution, implementing a plan, and checking again. It seems that the steps of reasoning carried out by critical thinkers are more logical, rational, careful, step-by-step details according to the focus of the problem before making a decision. Critical thinking is also more complex than ordinary thinking in general which only understands concepts or problems without being able to identify and explore problems to find further solutions because critical thinking requires higher mental abilities and intellectual abilities.

2.3 The Concept of Learning Methods

Problem-based learning is a learning method based on constructivism and accommodates student involvement in learning and is involved in solving contextual problems. To obtain information and develop learning concepts, students learn about how to build a problem framework, examine,

collect data and organize problems, compile facts, analyze data, compile arguments related to problem solving, then solve problems, either individually or in groups.

With such competencies, it is clear that education in the current era of globalization is strongly influenced by the ability of information literate human resources. Information literacy is a pillar of the progress of the world of education through improving the quality of education, which will give birth to quality agent of change, because it is run using a quality education system, qualified teachers, and quality teaching resources (Nurohman, 2014).

3. CONCLUSION

3.1 The Role of Problem Solving, Problem-Based Learning and Critical Thinking in the Era of Globalization

The 21st century was marked as a century of openness or the age of globalization, meaning that human life in the 21st century experienced fundamental changes that were different from the order of life in the previous century. It is said that the 21st century is a century that demands quality in all efforts and results of human labour. By itself, the 21st century calls for quality human resources, which are produced by professionally managed institutions to produce superior results. The new demands demand various breakthroughs in thinking, drafting and actions.

In other words a new paradigm is needed in the face of new challenges, said philosopher Khun. According to philosopher Khun, if using the old paradigm faces new challenges, then all efforts will fail. The new challenge demands a breakthrough thinking process if what is desired is quality output that can compete with the work in an open world (Trilling and Fadel, 2009).

In the current era of globalization, almost all lines of life for organizations and individuals are based on information and communication technology. Learning has also been an ICT-based system. For example the development of ICT-based learning models for. The ability of important values and their significance for the world of education is now recognized. Thus, it is also appropriate to recognize the importance of information sensitivity. This will foster the importance of information literacy for the world of education in the present era.

Globalization, which is characterized by important advances in information and communication technology such as this, also drives changes in the world of education, especially the learning process. Teachers have not become the only source in learning, because with technology, now it is very possible for students to access a variety of learning resources and learn for themselves. In addition to becoming increasingly simple and practical the role of teaching staff in front of students, this kind of paradigm further strengthens the idea of the importance of information literacy. However, the flood of information and development of software and hardware has added to the treasures of extraordinary

civilizations. Maximum utilization in the world of education will greatly help the change and transition of our educational civilization towards the world of education that is modern, globalized and competitive in the world market.

3.2 Learning Methods and Critical Thinking in Era Globalization

According to Boyer (1997), empowering the role of information is an important goal of education. He stated that information is a very valuable source. Education must be able to empower everyone to get information that fits his or her needs. In the world of education, where research is one of the main tasks that must be carried out, then the knowledge and results of previous research become a necessity in reference. A researcher will devote all his efforts to exploring information related to his research project. How much and the breadth of knowledge is obtained depends on their ability to search, search, find, evaluate information from millions of sources and variety. From what he gets (information about a knowledge) will produce a new knowledge.

The Ministry of Education and Culture formulates that the 21st century learning paradigm emphasizes the ability of students to find out from various sources, formulate problems, think analytically and collaborate and collaborate in solving problems. The explanation of the 21st century learning framework is as follows: (a) Critical-Thinking and Problem-Solving Skills, capable of thinking critically, laterally, and systemically, especially in the context of problem solving; (b) The ability to communicate and collaborate (Communication and Collaboration Skills), able to communicate and collaborate effectively with various parties; (c) Critical-Thinking and Problem-Solving Skills, capable of thinking critically, laterally, and systemically, especially in the context of problem solving; (d) The ability to communicate and collaborate (Communication and Collaboration Skills), able to communicate and collaborate effectively with various parties; (e) The ability to create and update (Creativity and Innovation Skills), is able to develop its creativity to produce innovative breakthroughs; (f) Literacy of information and communication technology (Information and Communications Technology Literacy), capable of utilizing information and communication technology to improve performance and daily activities; (g) Contextual Learning Skills, capable of undergoing contextual independent learning activities as part of personal development, and (h) Ability of information and media literacy, able to understand and use various communication media to convey various ideas and carry out activities collaboration and interaction with various parties.

4. REFERENCES

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