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Model of Social Multiliteracy Learning: A Solution Developing Critical Thinking Skills in The 21st Century Context

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Abstract. The purpose of this study is to describe the social multiliteracy learning model in developing critical thinking skills. This research is motivated by the importance of developing critical thinking skills in elementary school students in the context of the 21st century. This research uses literature study methods. The results showed that the steps of the social multiliteracy learning model include recognizing social phenomena, generating schemata, finding information, organizing information, elaborating and synthesizing information, summarizing key concepts and finally producing work having links with indicators of critical thinking skills namely interpretation, analysis , evaluation, explanation and inference. So it can be concluded that the social multiliteracy learning model can be one solution in developing students' critical thinking skills.

Keywords: Social Multiliteracy Learning Model, Critical Thinking Skills

INTRODUCTION The 21st century is marked by the rapid development of science and technology so that it affects various aspects of life including education. In the 21st century, information is easily accessed through internet media such as WA, Facebook, Twitter, Google etc. However, the 21st century cannot be separated from the negative impacts that also accompany it, such as information is so easily obtained, both true information and information that is lying, hoaxes, or slander. So, to avoid people using wrong information in making reference sources as a basis for thinking and equip them the ability to choose also to sort out information based on argumentation, evidence and sources that can be accounted for, it requires a critical thinking skills. As revealed by Binkley (2012) that in order to survive in the 21st century, a person must possess some skills called 21st century skills, including creative thinking skills, critical thinking, metacognitive thinking, communication, collaboration, information literacy, ICT literacy, citizenship , work and career, as well as individual and social responsibility skills. Furthermore, Trilling & Fadel (2009: 147) created a concept called the rainbow concept of 21st century skills and knowledge, which explains some of the 21st century skills that must be mastered. These skills include learning and innovating skills in which there are critical thinking abilities, creative thinking and problem solving skills, communication and collaboration skills, and the ability to be creative and innovate. To live in the 21st century, everyone needs problem solving skills, communication skills and critical thinking skills (Concannon & McCarthy, 2012: 73). From some of the opinions above, it is explained that one of the important skills to master in the 21st century is critical thinking skills.

Critical thinking skills make a person more careful in working, thinking, open to new perspectives, can help choose and sort

out relevant information to solve problems (Cottrel, 2011). Critical thinking uses reflective thinking in analyzing certain arguments in order to produce a conclusion that is accompanied by rational reasons and considerations (Arends & Klicher, 2010: 233). Furthermore according to Bialik & Fadel (2015) critical thinking is the ability to analyze, understand, apply, conclude, evaluate and synthesize. Critical thinking skills make a person not only able to store information but also understand complexly about the information they can (Dwyer et al, 2012). Thus, critical thinking skills are important to be built, because it has benefits that can help someone live and live in social and interpersonal contexts that can help decision making and problem solving in everyday life in the context of the 21st century (Ku, 2009).

21st Century learning requires the application of learning that is not only oriented to the mastery of knowledge but also to the mastery of competencies including one of them is critical thinking competence. But the conditions that occur in the world of our schooling, learning tends to be oriented only to the low-level cognitive domain. Many teachers pay less attention to developing critical thinking skills. This is due to the learning paradigm applied in schools that still use the teacher centered approach. The methods used are still using conventional methods such as lectures, questions and answers with questions that do not train students' critical thinking skills, and also assignments. Teachers tend to dominate learning and students learn only by memorization, while innovative learning models are still not widely implemented by teachers (Saido, 2012). Sopandi, et al. (2018) states that many teachers do not understand the syntax of innovative learning models, so the impact of conventional learning models remains the mainstay of teachers. Therefore, students' critical thinking skills are not optimal.

To overcome the above problems, the learning carried out in classrooms should need to use innovative learning models in order to develop critical thinking skills. According to Joyce (2001) the learning model is believed to be able to increase the achievement of learning objectives. Innovative learning models can be used as a choice for teachers so that learning becomes efficient and effective in achieving learning objectives (Rusman, 2010: 133). In line with the statement above, 21st century learning is also demanded to apply various innovative learning models in order to improve various abilities, competencies and also students' attitudes (Abidin, 2015: 117).

In the context of the 21st century, the application of innovative learning models is a necessity in teaching and learning activities in order to achieve 21st century competencies, one of which is critical thinking skills. 2 things are the reasons why researchers compile this article, the first researcher wants to provide an alternative learning model solutions that can improve

students' critical thinking skills and secondly there is the need for studies that can provide solutions to solve various educational problems including studies on how to develop skills students' critical thinking. According to researchers, a model that can be an alternative solution for developing critical thinking skills, one of which is a multiliteracy learning model. The multiliteracy learning model is a learning model that can facilitate students to master various 21st century competencies including critical thinking, collaboration, high understanding and communication by using various multiliteracy skills (Morocco in Abidin, 2015). This learning model is based on a component of the learning cycle that guides teachers to apply it successfully in classrooms containing syntax based on a scientific approach. The learning cycle includes involving, responding, elaborating, reviewing and presenting (Morocco, in Abidin et al. 2015).

METHOD

This research uses the type of literature study research. According to Marshal (in Aaron, 2008: 185) the study of literature is an activity evaluating the literature, answering important questions, and drawing conclusions from a variety of available literature. Furthermore Pan (2007) revealed that the study of literature is a work based on a critical examination of literature on a topic. Data sources used in the form of secondary data such as books, scientific articles, scientific journals and research reports.

RESULTS

Conditions that occur in the world of our schooling today, based on research conducted by Hestiningsih & Sugiharsono (2015) revealed that students still have critical thinking skills that tend to be low. This is marked by question and answer activities conducted by researchers with students, but rarely students who ask critical questions, even though asking critical questions is one of the characteristics of people who have critical thinking skills. Then marked by the results of the pretest that most students do not meet the KKM value specified by the education unit. Further research conducted by Nugraha, Suyitno & Susilaningsih (2017) revealed that students are not accustomed to thinking critically. This is marked by the use of test questions that are low order thinking that is at the level of the cognitive domain (C1) remembering and (C2) understanding.

Conversely, studies that use innovative learning models to solve learning problems are proven to be able to develop critical thinking skills, such as research conducted by Ardiyanti & Winarti (2013) The Effect of Phenomenon Based Learning Models to Improve Critical Thinking Skills of Primary School Students that the Phenomenon Based Learning model there is a significant influence on the improvement of critical thinking skills in each indicator, this is indicated by the results of the pre-test

which first got an average score of 35.28 then post-test to 80.56. Further research conducted by Lastriningsih (2018) entitled Improving Critical Thinking and Learning Achievement Through Inquiry Methods in Class IV Elementary School Students revealed the results that the inquiry method could improve students' critical thinking abilities. This is marked by the percentage of completeness of critical thinking skills that reaches 80% with an average grade of 3.12 so that it falls into the high category. Aspects of critical thinking consist of identifying problems, analyzing, and concluding. The percentage of completeness in identifying aspects of the problem reaches 95% so that it falls into the very high category. The percentage of completeness of the analyzing aspect becomes 80% so that it falls into the high category. While the percentage of completeness of the aspects concluded by 75% so that it falls into the high category. Subsequent research conducted by Juano & Pardjono (2016) with the title Effect of Problem Posing Learning Against Critical Thinking Ability and Mathematical Communication of Class V SD students stated the results that problem posing and direct instruction models can improve critical thinking skills in low and high ability students. This is indicated by the results of the pretest using problem posing models in high-ability students who get an average score of 7.1 while the post-test reaches an average score of 8.4. For students with low level ability pretest got an average score of 3.5 and posttest 6.7. Likewise with the direct instruction model, the ability of low level pretest students reached a score of 3.6 and posttest 6.3. For high-ability students with pretest 7.1 and posttest 7,9.

DISCUSSION

Based on the above results, the researcher will discuss one of the innovative learning models namely the social multiliteracy learning model in developing critical thinking skills. Multiliteracy learning is developed on the basis of diversity of students both in terms of intellectual, learning styles and also the learning capital which is oriented to mastering multicompetence (Abidin, 2015: 90-91). Multiliteracy learning is supported by constructivist theory which states that learning is a process of constructing / constructing knowledge by learners independently (Siregar & Nara, 2010: 39). The constructivist theory views that learning should be student-centered, students who are proactive in shaping knowledge and the teacher acts as a facilitator and mediator. In constructivist theory, learning consists of two processes, namely the process of assimilation and accommodation. Assimilation is a process of adaptation in the form of integration between concepts, views or new experiences with the old cognitive framework without changing the cognitive structure that has been owned while accommodation is the adjustment of cognitive structures caused by the mismatch of new experiences with existing

schemata (Piaget in Dodonov & Dodonova, 2011).

This model has relevance to critical thinking indicators. Indicators of critical thinking according to Facione (2015: 5-6), namely interpretation, analysis, evaluation, inference, explanation and self-regulation. The following are indicators and sub-indicators of critical thinking skills adapted from Nur (2013).

Tabel 1. Indicators of critical thingking skills

Indicator	**Sub Indicator**
Interpretations	Categorizing Encode Classifying
Analysis	Check ideas Analysis of arguments
Evaluation	Judging the argument
Inference	Question the evidence Predict alternatives Make decisions / conclusions
Explanation	States the results Justify the procedure Describe the argument
Self-regulation	Self study Correcting yourself

Indicators of thinking skills above are indicators that become a reference in this study. But in this study, researchers only took 5 indicators of critical thinking skills, namely interpretation, analysis, evaluation, inference and explanation. The indicators of critical thinking skills are reflected in the syntax of the social multiliteracy model. The syntax is as follows:

1. Recognizing Social Phenomena

The teacher introduces a situation or phenomenon to students. This phenomenon can be related to history, economy, culture and geography.

2. Generating Schemata

The teacher motivates students in learning and conveys learning objectives so that teachers and students have a reference to what must be achieved in learning. The teacher conducts questions and answers with students in order to explore students' initial knowledge related to the material to be learned. Questions given must include questions that require low-level thinking skills to high-level thinking. Students are expected to express their initial knowledge and express what they want to learn related to the phenomena that have been introduced.

3. Finding Information

Students perform activities in the form of searching for information either sourced from texts provided by the teacher, books from the library or exploring the world of the internet in groups. Students are expected to write information related to the phenomenon being studied by discussing and making concept maps or in other ways so as to accommodate the

information obtained. At this stage will bring up the ability of students to identify what kind of information is appropriate and suitable relating to the material being studied (Analysis).

4. Organizing Information

Students discuss integrating units of information with other units of information into one piece of information by classifying, coding or comparing data (Interpretation). The teacher can help and guide each group in interpreting the data.

5. Collaborating and Synthesizing Information.

Students elaborate and synthesize information so that various information can be inventoried and finally packaged comprehensively. At this stage students also check the truth by checking other sources (Evaluation).

6. Summarize key concepts

After students understand various information, students make conclusions and are asked to draw conclusions by summarizing key concepts in their own language. (inference)

7. Producing works

Students create creative mulitiliteration works that are commonly found in everyday life. Types of creative media can be in the form of brochures, pamphlets or other media in accordance with the interests, talents, abilities and learning styles of students. Students express learning outcomes by producing works (explanations).

This model can be one of the solutions in developing 21st century skills, especially critical thinking skills, from several research results this model has been proven to improve student learning outcomes both in aspects of knowledge such as understanding (Febriyanto & Yanto, 2019). Also aspects of skills such as the ability to think creatively (Dafit, Mustika & Ain, 2018).

CONCLUSION

Critical thinking skills are one of the most important skills mastered by students in order to be able to live and live in the 21st century. With critical thinking skills make a person more critical, thorough and can filter true or false information that can be used to solve problems, make decisions etc. In order to develop critical thinking skills in classrooms, an innovative learning model is needed as expressed by many researchers. The researcher suggests that one solution to develop critical thinking skills is to use social multiliteracy learning models. The syntax of multiliteracy learning models includes recognizing social phenomena, generating schemata, finding information, organizing information, elaborating and synthesizing information, summarizing key concepts and finally producing works that have relevance to indicators of critical thinking skills namely interpretation, analysis, evaluation, explanation and inference .

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