

The Implementation of Curriculum Thematic Learning in Developing Critical Thinking Ability of Elementary School Students

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ABSTRACT--- *Creative and critical thinking are two very basic human abilities because these two abilities can encourage someone to always look at every problem critically and try to find answers creatively. In the application of the teaching and learning process is less encouraging on achieving critical thinking skills. Two factors that cause critical thinking do not develop during education is a curriculum that is generally designed with broad material targets and the teacher's lack of understanding of teaching methods that can improve critical thinking skills. The Discovery Learning model in thematic learning is considered appropriate by researchers as an effective learning model to facilitate critical thinking development of students in elementary schools. So that the teacher's involvement in integrating learning material can guide students to find the concept or principle that demands mastery of competence from the material studied but the practice is still lacking in implementing the 2013 curriculum. Which is in this case researchers want to look up research on the evaluation of the implementation of thematic curriculum 2013 learning for critical thinking development of elementary school students.*

Keywords—*Critical Thinking; Discovery Learning; Creative Thinking.*

I. INTRODUCTION

Thematic learning emphasizes the active involvement of students in the learning process, so that students can gain hands-on experience and are trained to be able to find their own knowledge learned. Thematic learning emphasizes the application of the concept of learning while doing something (learning by doing). Therefore, teachers need to package or design learning experiences that will affect the meaningfulness of students' learning. Learning experiences that show the connection of conceptual elements make the learning process more effective. The conceptual linkages between subjects studied will form a scheme, so that students will gain integrity and unanimity of knowledge, attitudes, and skills because according to the stage of development of students who still see things as a holistic one[1][2].

Critical thinking skills of students are built through learning that applies the taxonomy of learning as presented by Benjamin Bloom in 1956 which was revised in 2001. Bloom divides education goals into three domains, namely cognitive, affective, and psychomotor domains. Educational goals were improved in 2001 [3].[2] The taxonomy of

learning is grouped into dimensions of knowledge and dimensions of cognitive processes. Character of critical thinking is one of the main capital for children to become independent people in a competitive future. The ability to think critically is very important to develop the ability to make decisions and solve problems. Thinking includes two main aspects, namely critical and creative. The 21st century learning paradigm emphasizes the ability of students to think critically, be able to connect knowledge with the real world, master information communication technology, and collaborate. Achieving these skills can be achieved by applying appropriate learning methods in terms of mastery of material and skills.

Creative and critical thinking are two very basic human abilities because these two abilities can encourage someone to always look at every problem faced critically and try to find answers creatively. Improving and developing creative thinking skills, a good business done by the teacher is to improve a conducive learning environment, namely the development of learning processes, approaches, and programs that are able to touch aspects of the potential of students in supporting the development of creativity and learning environments that directly gives opportunities for students to think openly and flexibly without fear or shame. [1] As stated by Killen that "No teaching strategy is better than others in all circumstances, so you have to be able to use a variety of teaching strategies, and make rational decisions about each of the teaching strategies is likely to most effective ". In practice the application of the teaching and learning process is less encouraging on achieving critical thinking skills. Two factors that cause critical thinking do not develop during education is a curriculum that is generally designed with broad material targets so that the teacher is more focused on the completion of the material and the teacher's lack of understanding of teaching methods that can improve critical thinking skills. The learning model that takes place is still struggling with low order thinking. Future challenges demanding learning should develop more creative and critical thinking skills.

Based on field observations process conducted, the implementation of thematic learning has not been fully implemented in accordance with the principles of thematic learning, the planning of the learning process is not prepared to adjust the development of the characteristics of students, the implementation of the learning process provided by

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teachers still tends to be partial, the use of media is still very limited, the learning model not varied so that the learning process is still monotonous and saturating, the teacher is still the center of learning. The 2013 curriculum mandates the essence of the scientific approach to learning [4][5][6][7]. Educators should teach their students "how to think" not "how to learn", the learning process that occurs is coupled with a scientific process that refers to investigative techniques on a phenomenon or phenomenon, to obtain new knowledge, or correct and integrate previous knowledge. Students are expected to be actively involved in exploring knowledge related to learning by using scientific methods. Discovery Learning model is one of the learning models that can change passive learning conditions to be active and creative, change teacher oriented learning to be student oriented, and change the expository mode where students only receive information as a whole from the teacher into a mode of change where students find information themselves. The Discovery Learning model in thematic learning is considered appropriate by researchers as an effective learning model to facilitate critical thinking development of students in elementary schools because in this model the problem is faced by students such as problems that are engineered by the teacher so that the teacher's involvement in integrating learning material can better guide students to find the concept or principle that demands mastery of competence from the material studied but the practice is still lacking in implementing the 2013 curriculum in this case interested researchers want to do research on the evaluation of the implementation of thematic curriculum 2013 learning for critical thinking development of elementary school students.[4]

The following questions will lead the researcher to come up the process of research evaluation. Those statements can practically outline and guide the gaining of information and data for the particular needs. The research started with How is the effectiveness of the thematic curriculum developer policy for the development of critical thinking in elementary schools. Furthermore, the research would like to figure out about How is the quality of the thematic learning curriculum document for the development of critical thinking in elementary school. Then, How is the quality of the preparation of thematic learning planning for the development of critical thinking in elementary schools. Moreover, it came to How is the effectiveness of the implementation / implementation of thematic learning processes for the achievement of critical thinking development in elementary schools. At last, the research came up to How is the quality of thematic learning evaluation for critical reinforcement thinking in elementary schools.

II. METHOD

In terms of delivering and applying the research methodology, researcher used mixed methods research design. This research design with mixed methods is a research method that combines or mixes two existing and known methods, namely quantitative and qualitative methods. Mixed Methods Research is also referred to as a methodology that provides philosophical assumptions in showing direction or giving instructions on how to collect

data and analyze data and combine quantitative and qualitative approaches through several phases of the research process.

III. RESULT AND DISCUSSION

In general, thematic learning must follow the rules in the Content Standards, one of which is critical thinking. However, in this material the theme of critical thinking learning strategies can be done through the presentation of a number of facts obtained from reading or other sources. Students are trained to interpret to build a structure for the process of changing events. In this case directly trained students understand that an event has a process of change. This is one characteristic that students do not get through other learning. Based on the functions and objectives of national education, the development of the curriculum must be rooted in the culture of the nation, the life of the nation today, and the life of the nation in the future. The curriculum in the process dimension is the realization of ideas and curriculum design into a learning process. Teachers are the main education personnel who develop ideas and designs into a learning process. The teacher's understanding of the curriculum will determine the teacher's design (Learning Program Plan/lesson plan) and be translated into learning activities. Learners relate directly to what the teacher does in learning activities and become a direct experience of students. What students experience will become learning outcomes for themselves and become curriculum results. Therefore the learning process must provide broad opportunities for students to develop their potential to be the same or higher learning outcomes than those stated in the Graduates Competency Standards [8][9].

Thematic learning is a learning approach that integrates various competencies from various subjects. The integration is carried out in 2 (two) things, namely the integration of attitudes, abilities / skills and knowledge in the learning process and the integration of various related basic concepts. The theme gives meaning to these basic concepts so that students do not learn basic concepts without being related to real life. Thus, learning provides real meaning to students. The theme chosen with regard to nature and human life. Both are giving substantial meaning to language, PPKn, mathematics and cultural arts because both are real environments where students and society live. This is where the basic capabilities of the Science and Social Sciences are organized into other subjects that have an important role as a binding and KD developer in other subjects.

Based on a psychological point of view, the level of development of students is not abstract enough to understand the content of subjects separately. The view of developmental and Gestalt psychology provides a strong foundation for integration of KD which is organized in thematic learning. From the point of view of transdisciplinary, the striking of curriculum content separately does not benefit the ability to think further. Thematic learning is a learning strategy that is applied for elementary school children in accordance with the stages of



child development, characteristics of the way children learn, the concept of learning and learning are meaningful, then learning activities for early elementary school children should be done with thematic learning using scientific approaches. Thematic training is learning lessons that use themes to link several subjects so that they can provide meaningful experiences to students. A theme is the main idea or idea that is the subject. The theme is expected to provide many benefits, including: (1) Students easily focus on a particular theme, (2) Students are able to learn knowledge and develop various basic competencies between subjects in the same theme; (3) Understanding of the subject matter is more in-depth and memorable; and (4) Basic competence can be developed better by linking other subjects with students' personal experiences.

Thematic learning prioritizes student learning experiences, namely through enjoyable learning without pressure and fear, but still meaningful for students in instilling concepts or knowledge and skills, students do not have to be given repeated rote training (drill), but he learns through experience training directly and relate it to other concepts that are already understood. There is an interaction process of reasoning, a thought process that deals with the student's direct experience. Integrated thematic learning that is applied in elementary schools in the 2013 curriculum is based on Permendikbud No. 22 of 2016 concerning the Standards of Process of Primary and Secondary Education which states that "In accordance with the Standards of Competency of Graduates and Content Standards, the learning principles used from partial learning towards integrated learning." The implementation of the 2013 Curriculum for SD / MI is carried out through learning with a thematic-integrated approach from Class I to Class VI [5][9][10].

Integrated thematic learning approaches are given in primary schools ranging from class I to class VI. Within the process, the approach used to integrate the basic competencies of various subjects, namely; intra-disciplinary, inter-disciplinary, multi-disciplinary and trans-disciplinary. Intra Discipline is the integration of the dimensions of attitudes, knowledge and skills as a whole in each subject that is integrated through the theme. Inter Discipline is to combine basic competency-basic competencies of several subjects to be related to one another as illustrated in the science and social studies subjects that are integrated in various other appropriate subjects. It is illustrated in the Elementary Curriculum Structure for Class I-III there are no science and social studies subjects but the content of Science and Social Sciences is integrated into other subjects, especially Indonesian. Multi Discipline is an approach without incorporating basic competencies so that each subject still has his own basic competencies. The picture is science and social studies that stand alone in grades IV-VI. Trans Discipline is an approach in determining themes that links various competencies of subjects with the problems that surround them.

Furthermore, the Integrated thematic learning is prepared based on a combination of various integration processes of various competencies. While integrated thematic learning is enriched with the placement of Indonesian subjects as a tool / media/ other subjects. Generally, the assessment is carried

out by referring to the indicators of each Basic Competency of each subject. So that, Integrated thematic learning presents concepts from various subjects found in KI-3 Basic Competencies (KD) and also the skills reflected in KD KI-4 in a learning process. The implementation of KI-3 KD and KI-4 KD is expected to develop various attitudes which are a reflection of KI-1 and KI-2. Through understanding the concepts and skills as a whole, it will help students to solve problems faced in daily life.

At last, an Integrated thematic learning is learning lessons that use themes to link multiple subjects so that they can provide meaningful experiences to students. A theme is the main idea or idea that is the. The use of themes is expected to provide many benefits, including: Students easily focus on a particular theme, Students are able to learn knowledge and develop various basic competencies between subjects in the same theme, Students understand the subject matter more deeply and impressively; Students can have better basic competencies, because they relate subjects to students' personal experiences; Students are able to feel the benefits and meaning of learning more because the material is presented in the context of a clear theme; Learners are more passionate about learning because they can communicate in real situations, to develop an ability in one subject while learning other subjects; The teacher can save time because the subjects presented thematically can be prepared at once and given in two or three meetings, the remaining time can be used for remedial activities, stabilization, or enrichment.

Pedagogically thematic learning is based on exploration of knowledge and values that are taught through themes so that students have a complete understanding. Students are positioned as explorers so that they are able to find relationships and patterns that exist in the real world in relevant contexts. Thematic learning is intended to develop various abilities, skills and attitudes acquired through an integrated thematic learning process into a real-world context that is brought into the creative learning process.

After a change pattern is formed, the child is trained to think critically in every change. The first exercise, is that children are told to look for facts, conceptualize and find out the causes of each process of change in everyday events. The first exercise, students are challenged to prove there is a change through the facts (events) of each process of change (how), when the changes (when), where it happened (who) and who the perpetrators (Who). The second exercise, students are trained to interpret to determine the concept of each fact (event) by raising the question "what is the name" (What)? Finally, students are trained to find the cause of each change, using questions, why is there a change (Why)? Likewise, for the development of any changes in life events this repeated exercise will form critical thinking skills as contained in the 2013 curriculum. One example is,

This strategy proves two things in interesting teaching that can improve critical thinking skills, namely: (1) Using relevant contexts can improve critical thinking skills while improving academic achievement, and (2) Assessment methods that require a deeper study, encourage students to

learn more meaningfully than just learn to memorize. Questions are given after obtaining the facts from each theme that will be studied. This shows that the information provided has been compiled by educators with a clear concept so as not to provide experience for students to determine the information needed to build their own concepts. One of the characters of a critical thinker is self regulatory, so that teaching can be combined with other strategies so students can determine information independently. So that each student has the opportunity to convey arguments from the answers to the questions given. The author assumes that questions that can encourage students to think critically can be included in the study guide as one source of learning. Collaborative learning through small group discussions is also recommended as a strategy that can improve critical thinking skills. By discussing students have the opportunity to clarify their understanding and evaluate the understanding of other students, observe the thinking strategies of others to be role models, help other students who are lacking to build understanding, increase motivation, and shape the necessary attitudes such as accepting criticism and expressing criticism in a way that polite.

The application of critical thinking in thematic learning starts from critical thinking activities which consist of formulating, analyzing, solving problems, concluding and evaluating. The explanation is as describe here. Formulating. Formulate to give a limitation of the object being observed. For example, in the eyes of social studies learning activities, this formulation is used by students to express facts from the material being studied, because the facts are a framework of thinking in social studies. Therefore, the why question raised in analyzing a historical event. In this case the analyzed is the cause and effect of an event that occurs after formulating the facts. Next, solving problems is a thinking process that applies concepts to new understandings. The aim is for students to be able to understand and apply concepts in new problems or scope. In this case concepts are used in explaining the causal relationship of a historical event. Generally, the Concluding process whereas Summing up is a thought process that deceives knowledge in such a way as to produce a new thought or knowledge. Drawing conclusions the aim is to find or test general knowledge called generalization (a statement that states the relationship between concepts and serves as a helper to think and understand) that does not have to be bound by time and place. One example is: The collapse of the Majapahit Empire was similar reasons which had destroyed other kingdoms, mainly because of the weak leadership of the king and the divisions that occurred in the kingdom. Lastly the evaluation is the process of assessing the object being observed. This assessment can be neutral, positive and negative or a combination of both. When something is evaluated, usually the evaluator makes a decision about the value or benefits. In learning taxonomy Bloom evaluates a high level of cognitive thinking. At the student stage it is demanded to be able to synergize other cognitive aspects in assessing a fact or concept.

Learning approach that is needed in increasing understanding of the material being studied is influenced by the development of mental processes used in thinking

(cognitive development) and concepts used in learning. Development is a process of change that occurs all the time in a positive direction. So cognitive development in education is a process that must be facilitated and evaluated in students throughout their time in education including critical thinking skills. One component of critical thinking that needs to be developed is intellectual skills. Intellectual skills are a set of skills that govern the processes that occur in one's mind. Various types of skills can be included as intellectual skills that become competencies that will be achieved in the teaching program. These skills need to be identified to be included both as competencies to be achieved and to be considered in determining the teaching process.

Bloom classifies intellectual skills from simple to complex skills including knowledge/recognition, understanding, application, analysis, synthesis, and evaluation. Analyzing, synthesizing, and evaluating skills in Bloom's taxonomy are higher-level skills (Higher Order Thinking) [3][11]. Agreements obtained from the results of the American Philosophical Association workshop (APA, 1990) on the components of intellectual skills needed in critical thinking include interpretation, analysis, evaluation, inference, explanation, and self regulation. Each of these components is a competency that needs to be compiled and agreed by educators on what behaviors should be shown by students in each component throughout the education program.

Core Critical Thinking Skills



Fig 1: Core Skills in Critical Thinking

So cognitive development in education is a process that must be facilitated and evaluated in students throughout their time in education including critical thinking skills. Each of these components is a competency that needs to be compiled and agreed by educators on what behaviors should be shown by students in each component throughout the education program [1][9].

IV. CONCLUSION

Practicing critical thinking can be done by questioning what is seen and heard. After that, proceed with asking why and how about it. In essence, do not immediately receive raw information entered. No matter where it comes from, the information obtained must be digested properly and carefully before finally concluded. According to SumadiSuryabrata (2001: 54) thinking is a dynamic process that can be described according to the process or path. He continued, the process or way of thinking was basically three steps,



namely: (1) the formation of understanding, (2) the formation of opinions, and (3) drawing conclusions. States that the thought process goes through five steps, namely: The subject feels a problem, Limiting problems, Formulating hypotheses: finding out correlations, Collecting and analyzing data, and Drawing conclusions [5][3].

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