DEVELOPMENT OF CONTEXTUAL LEARNING TOOL THEME OF VARIOUS WORKS TO TRAIN CREATIVE THINKING SKILLS AND STUDENT OUTCOMES GRADE IV PRIMARY SCHOOL

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Abstract

The purpose of this study is to describe the development of contextual learning tools of various occupations to train the ability of creative thinking and learning outcomes of fourth graders in SDN Kraton 2 Bangkalan. Validated learning tools were implemented to 30 students with one group pre-test-post test design. Instruments used in this study include: 1) the learning device validation sheet; 2) student activity observation sheets; 3) questionnaire of student response; 4) instrument of creative thinking ability test; 5) test result learning instruments. Creative thinking skills produce a narrative. While the technique of data analysis using inferential analysis to know the difference of test result of creative thinking skill and learning result between control group and experiment group using t-test analysis.

The quality of the developed device is evident from the assessment of expert validators who get good results for use. While the practicality of the device is evident from the observation of student activity during the learning process that gets a percentage of 83% of students who are active in learning. The effectiveness of instructional tools obtained from the test results of students who get a significance value of 0,000 <0.05 for creative thinking skills, while for learning results obtained a significance value of 0.020 <0.05.

Keywords: Learning Devices, Creative Thinking Skills, and Learning Outcomes.

1. Introduction

The changing education curriculum that will bring changes to the educational system requires educators to be more creative in finding a new breakthrough in order to support the new curriculum system of the 2013 curriculum. The 2013 curriculum familiarizes students with their own experiences of what teachers are teaching, not just memorizing like the previous curriculum. Teaching and Learning

Activities (TLA) in Curriculum 2013 is required to apply learning approaches to students as a subject of TLA, not as an object.

The objective of the Curriculum 2013 is to prepare Indonesian people to have the ability to live as individuals and citizens who are faithful, productive, creative, innovative, and affective and able to contribute to the life of society, nation, state and civilization world. From this goal is expected that children who already have basic education is able to make changes in attitudes and behavior better. In addition, the 2013 curriculum establishes learners' behaviors, which are categorized into three classifications: cognitive (knowledge), affective (attitude), and psychomotor (skills). So that is the main focus not only the result of learning, but also the process of learning.

The Curriculum 2013 uses an integrative thematic learning approach which is a learning approach that integrates the various competencies of the various subjects into a variety of themes. In addition, in the Curriculum 2013 uses active student learning that emphasizes the importance of students find out through the process of observing, asking, trying, reasoning, and communicating. From this active student learning, students will become know, able, and willing to learn. It is clear that the learning contained in the 2013 curriculum is a learning that links the material to be taught with the daily life of students with the aim that students experience themselves about the concepts taught by teachers.

Based on observations made by researchers at SDN Kraton 2 Bangkalan on March 06, 2017, found the fact that students do not understand the things that are around the environment where they perform their daily activities, ranging from typical regional culture, Types of healthy and unhealthy foods, local language everyday and many more that have not students understand. Students tend to master modern things and do not reflect a sense of pride of their own nation. This is supported by the acquisition of grades obtained by the fourth grade students of SDN Kraton 2 Bangkalan which completed only 13 students from 30 students in the class IV. This does not mean that teachers are not able to teach in the

classroom and are unable to make good learning tools. Teachers already have learning tools but which use a problem-based contextual approach does not exist yet. Therefore, researchers are interested to try to develop learning tools that use a contextual approach based on the problem. Contextual learning helps learners to experience what they are learning in real-life situations. The use of contextual learning is one of the steps to realize the objectives of the 2013 curriculum.

Contextual learning tool is a learning plan that contains learning that relate material to the conditions that exist in the real nature of students. The learning steps in the Learning Implementation Plan (RPP) are linked to the circumstances, conditions, and circumstances surrounding the students themselves. Therefore, it is expected that with this step the students can more easily capture the information provided by the teacher when learning in the classroom. Contextual learning is a learning concept that can help teachers relate between the material they teach to the students' real-world situations and encourage students to make connections between their knowledge and application in their lives as family members and society (Nurhadi in Rusman, 2011 p.189). In addition, the atmosphere of learning in the classroom should be fun for students. Teachers as much as possible create a classroom learning atmosphere that is fun for learners because if learners learn with a happy heart then the learning will be easily accepted by student.

The researcher hopes to use this step is the students as much as possible to solve the contextual problem that is related to the circumstances surrounding the students can train the skills of creative thinking in learning Curriculum 2013 especially in the field of Social Sciences. The purpose of IPS education is to establish and develop good citizen (good citizen) citizens. To realize that goal to the students, an educator must be able to bring up the creative thinking skills of the students (Waspodo, 2003 p.7). In accordance with the competency standards of SD / MI graduates are listed in the 2013 curriculum that has the ability to think and act productively and creatively in the realm of abstract and concrete in accordance with assigned to him.

Based on the above description, then formulated the problem to be studied, namely "How the process and the results of development of good learning tools by using a contextual approach on the theme of various jobs to train creative thinking skills and student learning outcomes class IV? The main purpose of this research is to develop a contextual learning tool that can be used to train creative thinking skills and learning outcomes for fourth graders of elementary school. With the success of this research, it is expected to be useful to provide input on developing the device with learning models that can improve creative thinking skills and student learning outcomes to be more skilled to solve problems. This study is also expected to improve student learning outcomes.

Some of the research that became a reference in this study include research articles about "The Effects of Problem-Based Learning Method in Higher Education on Creative Thinking" oleh Ersen Ersoy dan Nes'e Baser (http://sciencedirect.com), declare that "As a result of the study, an increase in the students' points for their creative thinking skills was observed at the end of the PBL process. In addition, it was determined that fluency, flexibility and originality, which are sub-dimensions of creative thinking skills, differed significantly". Also research articles about "The Effect of Gifted Students Creative Problem Solving Program on Creative Thinking" oleh Caglar Cetinkaya (http://sciencedirect.com), declare "Results indicated that there was not a significant difference ($p>.05$) between pretest scores of both group. Concerning post-test and pre-test, a significant difference ($p<.05$) was found in favor of experimental group."

2. **Conceptual Framework**

2.1 The Contextual Approach.

Contextual learning is a learning and teaching concept that helps teachers relate between the material they teach to the students' real-world situations and encourage students to make connections between their knowledge and application in their lives as family members, citizens, and workers (Berns and Erickson, 2001). .2). Contextual learning is an attempt to get students active in pumping self-esteem without loss in terms of benefits, because students try to

learn the concept as well as apply and relate it to the real world of students (Rusman, 2011 p.187).

In contextual learning students find meaningful connections between abstract ideas and practical application in their real-world contexts. Students internalize the concept through discovery, strengthening and connectedness. Contextual learning requires teamwork, both in class and outside the classroom. Contextual learning requires teachers to design a learning environment that combines several forms of learning experience to achieve the desired outcomes. Students more quickly understand the material to be submitted.

2.2 Problem Based Learning

Learning based on the problem is the interaction between the stimulus and the response, is the relationship between the two directions of learning and the environment. Problem-based learning is an effective approach to teaching high-level thinking processes (Dewey in Ibrahim, 2005 p.19). Problem-based teaching is a learning approach in which students work on authentic issues with the intent to develop their own knowledge, develop inquiry and higher-order thinking, development an independent and self-confident personality (Arends in Trianto, 2005 p.66).

The purpose of problem-based learning is to assist students in developing thinking skills, problem solving and intellectual skills. Problem-based learning syntax consists of 5 stages as shown in the following table:

2.3 Creative Thinking

Thinking is a mental activity involving the workings of the brain. Although it can not be separated from the work activities of the brain, the human mind is more than just the work of organs called the brain. Thinking activity also involves human

Table 2.1 Problem-Based Leraning Syntax

Phase	Behavior
(1)	(2)
Phase 1 Student orientation to the problem	The teacher explains the learning objectives, Describes the required logistics, proposes phenomena or demonstrations or stories to solve problems, and motivates students to engage in selected problem solving.
Phase 2 Organize students to learn	The teacher limits the student to define and organize the required learning tasks with respect to the problem
Phase 3 Guiding individual or group inquiries	eachers encourage students to gather appropriate information, conduct experiments to gain explanations and solve problem
Phase 4 Develop and present the work	Teachers assist students in planning and preparing works such as reports, videos, and models as well as helping students to share tasks with their friends
Phase 5 Analyze and evaluate the problem-solving process	Teachers help students to reflect on or evaluate their investigations and the processes they use

Source: Ibrahim in Trianto (2005 p.71-72)

feelings and will. To think of something is to direct oneself to a certain object, to be actively aware and to present it in the mind then to have an insight about the object (Ahmadi, 2011 p.120).

Human creative ability is the ability that helps it to do more than the rational possibilities of the data and knowledge it possesses (Sudarma, 2013 p.6). Creativity is one's ability to make something, whether it is in the form of ideas, steps, or products (Sudarma, 2013 p.9).

Helmholtz-Wallas (in Filsaime, 2008), emphasizes that creative thinking is a creative process. Creative thinking is a process that stimulates a person toward the creation of something new, better, original and useful for humanity. The process presents the upheaval of the individual's positive ability to mean and

immediately improve the life of the artistic power. Creative thinking is a process that is used when we bring in / create a new idea. Johnson (in Mariana, 2004), explains that critical thinking and creative thinking enable students to systematically study the problem, bring together many challenges in an organized way, formulate innovative questions and design / design original solutions.

Creativity in this research is intended as creativity in solving a problem or problem that is the ability of students to solve a problem or math problem that basically new and different from previous problems or problems. Creativity is reviewed by originality, elaboration, fluency, and flexibility.

2.4 Student learning outcomes

Learning is a process marked by a change in a person, changes as a result of the learning process can be shown in various forms such as changes in knowledge, understanding attitudes, and behavior, skills, abilities, habits, and changes in aspects that exist in individuals Learning (Sudjana 2011 p.2).

Learning outcomes are the abilities students have after they have received their learning experience (Sudjana, 2011 p.22).

2.5 Social science in elementary school

Social science in elementary is a subject that studies humans in all aspects of life and its interactions in society. The purpose of teaching Social Studies is to introduce students to the knowledge about human life in a systematic way. Thus, the role of IPS is crucial to educating students to develop knowledge, attitudes, and skills in order to take an active part in their future lives as members of society and citizens. The purpose of education Social science is to establish and develop good citizen (Waspodo and Suhanadji, 2003 p.1).

3. **Method**

3.1 Research Design

The research used here is research development. Research development is the research done to produce learning tools which include Learning Implementation Plan (RPP), Student Worksheet (LKS), Student Textbook (BAS) and Learning Results Test (THB). This development research is carried out to produce learning tools which will then be tested in the class after going through the validation process. The model used for the development of learning tools using the general model of educational problem solving developed by Plomp (1997), with the quality criteria of a product by Nieveen (1999).

This research was conducted at SDN Kraton 2 Bangkalan with research subject of fourth grade student in academic year 2016/2017.

3.2 Data collection technique

In developing the learning tools in this study, data collection was done using observation, test and questionnaire techniques. Required instruments include: device validation sheet, student activity observation sheet, student response questionnaire, student creativity test, and learning result test.

The data analysis technique used descriptive analysis for creative thinking ability and inferential analysis technique to know the difference of test result of creative thinking skill and learning result between control group and experiment group using t-test test.

$$t = \frac{m_x - m_y}{\sqrt{\left(\frac{\Sigma x^2 + \Sigma y^2}{N_x + N_y - 2}\right)\left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

(Arikunto, 2006 p.489)

4. **RESULT**

4.1 Learning Device Validation Results

Prior to the implementation of the research, validation of learning tools, including Learning Implementation Plan (LIP), Student Worksheet (SW), and Learning Results Test (LRT) were conducted. Validation of instructional devices is done by validators who are competent in their field. Validation results from the validator are followed up with a revision in accordance with the advice given by the validator. The revised learning tool becomes the final learning tool used in the research for the data retrieval process. After the revision in accordance with the suggestions and input provided by the validator, the LRT item will be tested in the test class and then analyzed to determine the validation and reliability level of the item.

4.2 Result Observation of Student Activity

The result of observation on student activity on contextual learning implementation and non contextual learning implementation by two observers was obtained result: from meeting 1 to meeting 2 get percentage of 83% or 83% of students have activity in accordance with planned activities. The student activity criteria are in very good category. The result of observation of student activity on non-contextual learning from meeting 1 to meeting 2 get percentage 32% or 32% of students do activity according to planned activity. The student activity criteria are in very less category. From the calculation results obtained that the learning tool has met the criteria of practicality.

4.3 Analisis Keefektifan Perangkat Pembelajaran (Analisis Hasil Belajar)

The basis of decision making based on the comparison of significance (Sig.) To 5% error rate (Sugiyono, 2012 p.230) with the following information: in the pretest hypothesis test, the value of learning outcomes on contextual learning and on non-contextual learning, 0.115. Thus the significance value is greater than 0.05 (0.115> 0.05). Based on these results, then there is no difference in learning outcomes in contextual learning and non-contextual learning.

In the posttest test, the value of learning outcomes in contextual learning and on non-contextual learning results obtained by a significance value of 0.020.

Thus the significance value is less than 0.05 (0.020 <0.05). The value of creative thinking skills in contextual learning and on non-contextual learning, obtained a significance value of 0.000. Thus the significance value is less than 0.05 (0.000 <0.05). Based on these results, there are differences in learning outcomes in contextual learning and non-contextual learning and meeting the criteria of effectiveness.

4.4 Analysis of Student Response after Following Contextual Learning

Results Recapitulation Questionnaire Student feedback on the application of learning with contextual Approach shows that the material, student books, atmosphere and way of teaching teachers 100% of students feel interested. Students' opinions about the material feel 100% not new, 100% student books are not new, new 87% learning atmosphere, and the way the teaching teacher feels 93% new. Their opinions on teaching materials feel 47% easy, in understanding the book students feel 70% easy, the matter in the book students feel 77% easy, the way teachers teach feel 90% easy. Explanation of teacher, teacher guidance according to student opinion 93% clear, student feel 87% easy in doing evaluation question. Students feel 100% interested in the overall results of teaching and learning activities with contextual approach. Thus the learning device is done well.

Principal obstacles are basically not found during the learning activities, so there is nothing in the whole that disrupts the course of the implementation of learning. However, there are some things that need attention, namely (a) there are some students who talk with friends and engage in self-play, so the teacher needs to remind the student; (b) there are some students who are less concentrated during the lesson so teachers give ice breaking to inspire students to learn; (c) there are groups who have difficulty understanding the steps in the experiment, so that the teacher provides guidance.

5. **Discussion**

5.1 Eligibility of Learning Device (Observation of Student Activity)

Before being used for testing, student activity observation sheets are validated first by validators skilled in the art. Aspects observed in student activities consist of (1) attention to teacher explanation; (2) cooperation in groups; (3) ask if not understand; (4) answer questions in groups; (5) to express an opinion; (6) listen well; And (7) assist each other in solving the problem. All these aspects are developed based on a problem-based contextual approach that contains student roles in the learning process.

The effectiveness of learning will not be realized if the student activities that are expected to appear in the learning does not occur. In this study, student activities that are in accordance with the problem-based contextual learning approach have been very well executed. This can be seen in the observations made on student activities meeting 1 to 2 meetings get the percentage of 83% or 83% of students have done activities in accordance with the activities that have been planned. The student activity criteria are in very good category. The above results are consistent with Rusman's (2011 p.187) theory that contextual learning is an attempt to get students active in pumping self-esteem without loss in terms of benefits, because students try to learn concepts as well as apply and relate them to the real world of students. Because the student activity is done very well, then the student activity that Rusman put forward (the involvement of students in initiative, such as answering and asking questions, trying to solve the problems raised or arising during the learning process) is also running very well.

5.2 Learning Device Effectiveness (Analysis of Learning Outcomes)

Based on the results of the analysis on the test results obtained results of significance of 0.020. Thus the significance value is less than 0.05 (0.020 <0.05). Based on these results, then there are differences in student learning outcomes after following contextual learning compared to after following non-contextual learning.

The results are in line with previous research conducted by Sanun (2014) states that there is a significant difference between the critical thinking and creative thinking of children using Problem-Based Learning Model in the

experimental class with inquiry learning in the control class. The critical and creative thinking ability of children using Problem-Based Learning Model has increased significantly compared with using Inquiry learning.

5.3 Analysis of Student Creative Thinking Skills

Based on the results of the analysis on the test of creative thinking skills obtained results of significance of 0.000. Thus the value of significance is less than 0.05 (0,000 <0.05), then there is a difference in the students' creative thinking skill after following contextual learning compared to after non-contextual learning.

The results of this study are also in line with previous research conducted by Ratna Tirtawati et al. (1) there are differences in creative thinking skills and biology learning outcomes between students who are taught by quantum learning and mind map with students who are taught by direct learning model, (2) there is a difference of creative thinking skills between students who are taught by learning Quantum and mind map with students who are taught by direct learning model, and (3) there are differences in biology learning outcomes between students who are taught by quantum learning and mind map with students who are taught by direct learning model.

Implementing a contextual learning approach can train creative thinking skills. This can be seen from the participation of students in the learning process more. With the participation of more students so as to direct students to be able to issue ideas and ideas in a wider scope and with time can be developed further.

5.4 Practicality of Learning Devices (Student Response to Learning)

Result of questionnaire Student Response to the application of learning with Contextual Approach shows that the material, student book, atmosphere and way of teaching teachers 100% of students feel interested. Students' opinions about the material feel 100% not new,

100% student books are not new, new 87% learning atmosphere, and the way the teaching teacher feels 93% new. Their opinions on teaching materials feel 47% easy, in understanding the book students feel 70% easy, the matter in the book students feel 77% easy, the way teachers teach feel 90% easy. Explanation of teacher, teacher guidance according to student opinion 93% clear, student feel 87% easy in doing evaluation question. Students feel 100% interested in the overall results of teaching and learning activities with contextual approach.

Student response during learning activities is good enough, it is shown when teachers facilitate students to observe their activities eagerly and no one is not paying attention. When the teacher asked questions, the majority of students raised their hands and attempted to answer questions from the teacher and the answers given by the students varied, indicating that the students understood the concept of the material given by the teacher. During the reasoning activity, students can express their original ideas that show the student's creativity. In addition, students also try to deepen the concept of the material with the creativity they have. From observing activities, asking questions, reasoning, trying and forming a network, students will easily understand the concept of the material because a concept will be more easily understood if students can find the concept itself, in addition to that the creativity of students also develops because students can express ideas they have. With high student responses on learning using contextual approach can improve student learning outcomes and creativity.

Student involvement in learning planning, learning process, and evaluation of learning also can not be separated influence on creative thinking skills and learning outcomes, because by actively involved directly then the learning process followed by students will be more meaningful. This is in line with Rusman (2012 p.391) that learning is considered meaningful if in the learning process students are actively involved, to seek and find their own problem solving and find their own knowledge through direct understanding.

6. **Conclusions**

Based on the discussion of research results can be drawn conclusion as follows.

- Contextual learning tools that have been developed have met the eligibility criteria based on the validation results by two expert validators who get the average score criteria both in each meeting.
- Contextual learning tools that have been developed have met the criteria of practicality that can be seen from the activities of students during research activities and get satisfactory results in the sense that students are motivated to learn to use tools that have been developed. Student activity in contextual learning works well. Because in a contextual learning approach, students are more actively involved during the learning process.
- The effectiveness of instructional tools can be seen from the significant differences between learning outcomes after following contextual learning compared to after non-contextual learning. Then there is also a significant difference between creative thinking skills after following contextual learning compared to after non-contextual learning.
- Barriers in research can be overcome well so as not to disrupt the course of learning as a whole.

Each approach to learning certainly has constraints in implementing it, not least in implementing a problem-based contextual learning approach. Therefore, professional attitude of teachers is needed in guiding and facilitating students in their learning activities. With the support of adequate learning infrastructure and learning environment that support the implementation of contextual learning approach.

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