

# COOPERATIVE SCRIPTS MODEL IN CIVIC EDUCATION FOR ELEMENTARY SCHOOL STUDENTS

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## ABSTRACT

*The purpose of this research was to eliminate misconceptions and increase the level of students' comprehension on Civic Education subject cultural diversity in Indonesia matters. The research applied a quasi-experimental method. The respondents were 25 students of SDN Muhammadiyah 1 Banyuwangi, Malang. Data were analyzed descriptively qualitative and quantitative. The results show valid learning materials, activity on student-centered, teaching and learning materialized well (3,9). The result of students' concept comprehension has been analyzed by N-Gain that shows improvement (0,75), and students' misconception is decreasing. It can be said that the Cooperative Scripts learning materials are feasible, has influence, and can enhance the concept comprehension and significantly affect the elimination of students' misconception on Civic Education subject in Elementary school students.*

**Keywords:** cooperative scripts, concepts comprehension, misconception, elementary school

## INTRODUCTION

The education system in Indonesia has undergone many changes in an effort to improve its quality one of them is the establishment of the curriculum 2013. In line with these reforms, there is a constructive effort to improve the quality of education and teaching, especially in understanding the concept of the subject Civics Education in the curriculum 2013. It is one of the subjects in primary schools that are integrated into other subjects such as into Indonesian Education Subject.

In line with Curriculum 2013, which has the step of communicating in the learning steps, then it has been developed a cooperative scripts model learning materials, where students work in pairs and take turns orally summarize part of the materials studied (Slavin, 2011). Studies that have been done using a model of Cooperative Script aims at obtaining measures of cooperative learning by showing that the pace of cooperative learning using Cooperative Script. It can improve student learning outcomes in the seventh grade-B of SDN Muhammadiyah 1 Banyuwangi, Malang, in math subject (Verina, 2009).

Students through Cooperative Scripts learning models could be more easily understand the explanation of their friend by taking it to social language because of the level of knowledge and their thinking is in line and commensurate (Miller, 2008). This Cooperative Scripts learning techniques encourages student activity during the learning, including the courage of students in expressing their ideas, asking questions, train memory of students, as well as their speed in thought (Ginnis, 2008). The relevance of the Cooperative Script learning model is that a matter of Civic Education in the fifth grade in elementary school is textual. And therefore have relevance, it is able to try to develop a Cooperative Scripts model that combines the ability to communicate because this technique provides a

discussion that helps students to understand the scientific concepts, so as to improve the students' understanding of the concept and eliminate their misconceptions.

## METHODS

This study is a quasi-experimental research by using Cooperative Scripts teaching and learning materials that refer to 4D modeling that has been modified. The learning device consists of Learning Implementation Plan (RPP), Activity Sheet Students (LKS), students' teaching materials, and instruments evaluation tested of Civic Education learning activities in the classroom to the subject matter of cultural diversity in Indonesia. Furthermore, to see whether there is any difference in pretest and posttest, and there is any influence of Cooperative Scripts models to students' understanding of the Civic Education concepts, the test results are using differential-test analysis of SPSS 20 that is a T-test.

The research respondent is 25 students of the fifth class in a single class in Banyuajuh 2, State Elementary School, on the last semester 2014-2015 academic calendar. This research is a development research using the One-group pretest-posttest design (Fraenkel, 2008).

O1 X O2

Description:

O1 = Pre-test

X = Model treatment of Cooperative Scripts

O2 = Post-test

The procedure of this study consists of two phases; the first phase is the stage of development of learning materials with the 4D model (Trianto, 2007). But in this study, the learning material is developed until 3D stages that are defining, designing, and developing. The second phase is in the form of a pilot phase or implementation of learning materials to see the impacts to the learning outcomes.

In the first phase, activities undertaken in the development phase are the making of the learning and research instruments such as syllabus, learning implementation plan, student activity sheet, students' books and student assessment instruments, and also validation constructs and the contents of the learning materials by experts. The implementation phase of the learning materials includes enforceability of lesson plan.

In the second phase, the trial of teaching and learning materials implementation has two major stages of Cooperative Script model that are an individual stage and cooperative stage that disperses into four phases. The first phase is reading and extraction of information cases as an individual. It consists of reading text and excerpts from relevant case information. In the first 15 minutes, each student should think about the main causes mentioned in perspective and record them on paper individually. The next phase is an exchange of information, clarify, discuss, and write the results in the document cooperatively. Students are asked to exchange their different information regarding this case and immediately asked for an explanation about the material that other people do not understand. It is done because, in a certain way, the information from a different perspective is necessary to be discussed on the different causes and possible solutions. All issues relevant to the solution of cases must be filled in documentation in the form of text. Next, the phase of reflections on the solution of cases as an individual is conducted. After revealing and recording all the major issues, students must reflect the suitability of note developed in 5 minutes. The last phase is a discussion of the case and the final solution cooperatively. The students have 15 minutes to discuss the specific issues, they ponder

during the third phase, and decide which will be the final solution in a presentation as a group solution (Kopp, Ertl, & Mandl, 2004).

Techniques of data collection are done by observation, tests, and questionnaires. Observations are made to collect research data of Implementation Plan enforceability carried out by two observers. Tests are performed to measure students' concept comprehension of Civic Education, as well as the sensitivity of each test items. The questionnaires are used to collect information on students' comprehension of the concept of Civic Education, students' misconceptions, students' response data to the learning activities and expert assessment.

The data are analyzed by descriptive quantitative comprehension include the students' concept, students' misconceptions, the effect of applying the Cooperative Scripts model towards the students' concepts comprehension and misconceptions at Civic Education matters. Data from the pretest and posttest of students' understanding and misconceptions in Civic education matters are analyzed by CRI and N-gain Score. The purpose is to know the level of students' concept comprehension. The effect of applying the model Cooperative Scripts is analyzed by t-test (Amir, 2006). Data analyze the feasibility of the materials over the average rating score from two experts/validator including construct and content of learning materials empirically. Data from enforceability of lesson plan is analyzed from the average rating score of two observers.

## RESULTS AND DISCUSSIONS

The result and discussion show that Cooperative Scripts lesson plan is developed as a guide in teaching students' concept comprehension by reference to the curriculum 2013 that implemented scientific approaches. It stated in Education Ministry Regulation number 81A, which combines the Taxonomy and Krathwohl and skills of Dyers (Anderson and Krathwohl, 2001). Their conformity with the model of Cooperative Script at last 5M is to communicate, then been selected a conceptual approach to gain an understanding of the concepts and the elimination of misconceptions. It is backed by theories of the main thing in learning a concept to bring something to a particular group into the classroom and ask students to get to know other members of this group (Gagne in Ibrahim, 2012).

Validated Lesson plan (RPP) has been conveyed five times by face to face with the details of three meetings to conduct teaching and learning process and two meetings for the pretest and posttest. The student activity sheet is developed based on matters and instructional strategies used. Developed student activity sheet contains different topics with problems at each meeting. Student activity sheet is developed in targeting on the study of Civic Education using Cooperative Scripts models with a scientific approach that aims to increase students' comprehension concepts and eliminate students' misconceptions (Slavin, 1996). In the student activity sheet at each meeting contains the basic activity that must be done to maximize student concept comprehension through a model of Cooperative Scripts (Hadi, 2007).

Developed Student activity sheet (LKS) has been validated by three expert lecturers to determine the truth of the format and content to seek the enforceability of LKS. The average results of the validation from education experts covering aspects of the instructions, feasibility of content, communication skills, procedures, and questions get an average score of 3,9 that is a good criterion. It shows that the student activity sheet developed can be declared eligible to be implemented in schools.

Validated teaching materials use as a learning resource for students to learn the material on cultural diversity in Indonesia. During the trial, each student is given teaching materials. Teacher guides students to discover important information needed during the learning process. The developed

teaching materials are also equipped with vocabulary lists, sets of words or terms that must be understood by students to support the process of understanding the material (Felder, 2003). Pictures and illustrations serve as a means to help the materials comprehension. Some of the student activity contains activities that serve as a means for applying the understanding of the concept of Civic Education. There is summary serves as a means for students to understand the outline of the material in the subthemes discussed and capability test contains a description task about the understanding of the concept. From the score of validation (4,5 with very well criteria), it could be known that the teaching materials developed are feasible to be implemented in schools. Eligibility of teaching materials is based on BSNP guidelines on the criteria of teaching materials that cover the feasibility of the construct and content, linguistic component, and component of the presentation.

The making of the concept comprehension test as a device is used to determine the ability of absorption of students that represented by the mastery of learning outcomes on indicators that have been developed. It is based on the achievement of KKM (minimal Mastery competency) that has been set by SDN Banyuajuh 2 which is 70%. Developed assessment sheets contain questions that are assessing the students' understanding the concept. The concept comprehension test is validated by two experts in education. The results of the validator provide a valid assessment without revision and partly a matter of getting both categories with minor revisions. It indicates that the test comprehension concepts developed are feasible to be implemented in schools.

Implementation of Learning Implementation Plan (RPP) refers to the model curriculum 2013 Cooperative Scripts to increase the comprehension the concept of Civic Education in Primary School students. The approach is scientific approach refers to Permendiknas no. 81A and their conformity with the model of Cooperative Script are the final 5M in which communicating. Many students feel the benefits of working with classmates to discuss the material they have read or hear in the upscale workout peers. Felder (2003) has suggested that the measured performance outcomes include knowledge acquisition, retention, accuracy, and creativity in problem-solving and higher-level reasoning.

In line with Arends (2008), it can be gained by comprehension, the concept of communication skills due to this skill will involve thinking. There is a strong relationship between language and thought that both results in the ability to analyze, to reason deductively and inductively, and make a reasonable inference, based on knowledge (Arends, 2008). Correspondence between the methods and the student activity cannot be separated from the enforceability of the stages of learning that has been designed. The implementation of the stages of learning is the good influence for students in learning activities (Degeng, 2013).

Teaching and learning activities in this research are conducted three times and at every meeting observed by two observers who have been given an explanation or brief training beforehand. The observed overall aspects include the introduction, core, closing, time management, and classroom atmosphere. Based on the data which can be determined the average ability of teachers in implementing the learning categorized either by the average scores of the two observers is 3,98, observations enforceability of RPP scored 99% in the category of reliable. This shows consistency reliability (consistency enforceability of learning) when the RPP is tested a second time that the real test with the same device will get results that are relatively the same. This is according to Ibrahim (2005), which explains that every measurement contains errors in it, whereas measurements are repeated at different times never gave the same results.

Teaching materials are developed to get the level of good legibility which means the material teaching are developed in accordance with the characteristics of the intellectual development of students that is based on the procedure Fry and graphs Fry. Based on the results of calculations per hundred words of 3 pieces of samples of discourse in teaching materials, as a result of the intersection of the vertical line and horizontal in the graph FRY which shows the numbers conformity levels or

classes of readers. This means teaching materials developed in accordance with the characteristics of the intellectual development of formal operational i.e. in grade 5 elementary school, where children are able to think abstractly, idealistic and logically fit opinions that at this stage cognitive abilities of students has grown significantly but is still limited (Dimiyati and Mudjiono, 2009).

Improved comprehension of the concept of Civic Education students can be seen from the test results of understanding the concept of students as measured using the CRI and N-gain scores. N gain shows a different perception of the concept of students before and after a given treatment (Pavio, 2006). The gain normalized score indicates the level of effectiveness of the treatment of the acquisition of scores of posttest. CRI indicates the level of confidence of students in answering the question pretest and posttest, combined with the accuracy of the answers; then the points are obtained by referring to the score table of criteria CRI (Ibrahim, 2012).

Results from the study show an increased understanding of the concept of the test results Civic Education students in the posttest. In accordance with Arends (2008) which has stated that an understanding of the concepts can be obtained by skill communicate due to communicating will involve the process of thinking. There is a relationship between language and thought, both results in the ability to analyze, to reason deductively and inductively, and make inferences that are reasonable, based on knowledge.

This study measures and compares the mastery of learning outcomes based on the value obtained from the pretest and posttest. Thoroughness of learning outcomes as measured by indicators and learning objectives are developed. Indicators used in the Basic Competence 3 in the curriculum 2013 that has familiar synonymous with understanding, so that the indicators used for the fulfillment of the competence of students are started at the level of C3 on Bloom's taxonomy.

The post test result of 22 students indicates that all students finished the test (100%) and classical completeness of students (100%) with index measurement sensitivity of the matter developed on average show the index results 0,3 that sensitive means (Ibrahim, 2005). The results of N-Gain tests of the students determine the amount of acquisition students' understanding of the concept in Civic Education showed 0,65. It indicates there is a moderate increased on comprehension of the concept of Civic Education. Analysis of N-Gain also shows a difference between before and after implementation of the model Cooperative Scripts.

Statistical analysis shows that data processing are done through the testing Shapiro-Wilk test to determine the normal distribution of students' concept comprehension test, obtained an average value sig (2-tailed)  $0,708 > \alpha = 0,05$ . It means that the class with the implementation of cooperative learning model could be analyzed by different test with the paired-T test using SPSS 20. Testing homogeneity of variance is done by using Test Levene's test that shows the application of cooperative learning model scripts after data analysis sig-count =  $0,445 > \text{sig-table } (\alpha) = 0,05$ . It can be concluded that the class with Cooperative Scripts learning model application has variants equal or homogeneous, so it has been qualified to do the analysis of the t-test.

T-test results are conducted to determine whether there is a difference and influence Cooperative Script model application of the results of pretest and posttest students. T-test results show sig-count =  $0,02 < \text{sig. } \alpha = 0,05$  in which means there are significant differences in learning outcomes between classes using Cooperative Scripts learning the model application. So it is assumed that the application of the Cooperative Scripts model significantly has influenced the students' concepts understanding in Civic Education subject. Based on analysis using CRI on the students' comprehension of the Civic Education concept, by using the teaching and learning materials with Cooperative Scripts model could enhance the students' understanding of the Civic Education concept significantly. This could be seen both in conceptual understanding test results based on pretest and

posttest of students results. And by judging the accuracy of the answers grains per items, the obtained value of N-Gain of items show a score of 0,65. It can be seen in Figure 1.

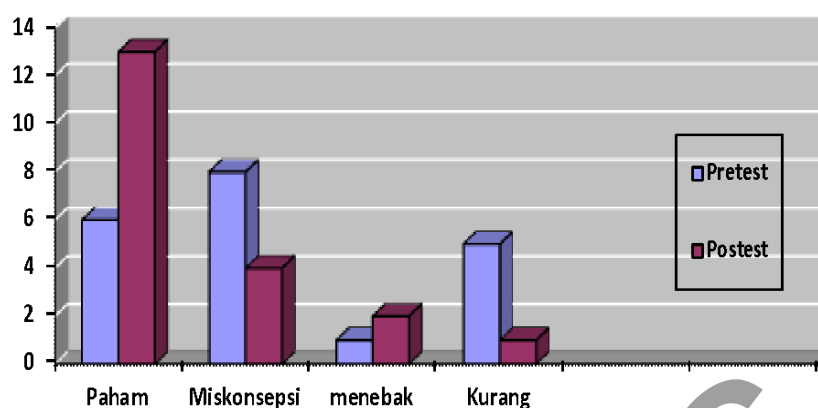


Figure 1 Students' Concept Comprehension and Misconception

Figure 1 shows the effectiveness of learning with models Cooperative Scripts or measurements based on students' beliefs combined with the accuracy of the answers to the test refers to the decision matrix table CRI. Obtaining N-gain value in improving CRI scores shows an increased understanding of the concept of the right (0,75), the remediation of misconceptions (-0,42), a decrease in the number of students answered incorrectly because of a lack of knowledge (-0,39). In line with Sharan (2012) which has stated that these cooperative techniques to organize discussion are needed to help students understand scientific concepts (Hakim, Liliyasi, & Kadarohman, 2012).

Response to the students' learning activities using Cooperative Script shows that it makes students are interested in understanding the material concept of Civic Education. It is known from the data results of filling the questionnaire after the following study. Students' positive response to the subject matter, worksheets, teaching materials student, learning atmosphere, the way teachers teach, and the stages direct teachers in the learning process. The results show that 95% of students interested in taking back the learning process with Scripts Cooperative models.

The high interest of students can be seen from the enthusiastic students follow steps of learning using Cooperative Scripts model. It is very reasonable because the curiosity of students and the steps in learning are closely related to ordinary life the students that reveal the material in style the students themselves together with friends to understand the concepts they have learned (Miller, 2008). To get the positive response from 100% of students that feel understand clearly can be seen by the way the teachers teach them. This is the stages of learning model of Cooperative Scripts that are attractive to students.

Data of the students' responses also show that learning with models Cooperative Scripts could assist students in answering the test items in the understanding of the concept with students who have high difficulty, especially in understanding many concepts of material (Felder, 2003). Students look very interested in learning Cooperative Scripts, but they still need the guidance of teachers to overcome the difficulties in the syntax of the learning process as this model is relatively new applied in teaching Civic Education. Besides that, the guidance of teachers is to ensure that students experience success when they apply the concept (Kardi, 2005).

Overall, students give a positive response indicating that students enthusiastic about learning presented. It can motivate students to improve their attention and get them involved in the learning experience that enjoyable and meaningful (Nur, 2010). A practically almost not encountered significant problem in learning, but it only takes teachers' guidance because there seems little awkwardness of students due to the application of the Cooperative Script model is a new thing that needs adjustment. Teachers should be good at motivating and encouraging students to appear, speak to the class, and listen to or correct the exposure of the material from teammate group (Bonk, 1998).

## CONCLUSIONS

Based on the research, it can be concluded that the first phase in making learning device Civic Education models Cooperative Scripts is feasible with good criteria, including the terms of validity, practicality, and effectiveness. In the second phase, the implementation Civic education teaching and learning materials using Cooperative Scripts model in class is proven to increase and affect the understanding of the concept and decrease the misconceptions of students, especially on the subject of cultural diversity in Indonesia.

It needs further research on the suitability of implementation tools Scripts Cooperative learning models in other disciplines to broaden knowledge for teachers. Besides that, the principal suggests that teachers should give more attention to time management and coaching students in order to do well in learning by using a model Cooperative Scripts.

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