

EFFECT OF IMPLEMENTATION OF COOPERATIVE LEARNING MODEL MAKE A MATCH TECHNIQUE ON STUDENT LEARNING MOTIVATION IN SOCIAL SCIENCE LEARNING (Quasi Experimental Class VIII SMP Negeri 40 Bandung)

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Abstract-The problem in this study is the low motivation to learn social science in students class VIII. Those are based on the observation that teachers have not applied varied learning models and tend to use conventional learning method. Learning activities have not actively involved students and many students feel bored in social science learning. Teachers need to overcome these problems by applying creative learning model, fun and can foster students' learning motivation, one of them is cooperative learning model of make a match technique. This study aims to determine the effect of cooperative learning model of make a match technique to the motivation of social science learning in students class VIII SMP Negeri 40 Bandung. The design of this study uses Nonequivalent Control Group Design with quasi experimental research method. The samples of this study are 60 students and using 2 classes, namely class VIII D as experiment class and class VIII C as control class. Data were analyzed by using SPSS 17.00 for windows. The results showed that: First, the learning motivation of students before and after implementing cooperative learning model of make a match technique increased but still low category. Second, the students' learning motivation before and after implementing conventional method did not increase. Third, simultaneously learning motivation between students who learn with cooperative learning model of make a match technique is better than students who learn with conventional learning method.

Keywords: Quasi Experimental, Cooperative Learning Model of Make A Match Technique, Student Learning Motivation.

INTRODUCTION

Motivation is an impulse within an individual to do something. This motivation is an important factor in students for the learning process. Someone who has a high learning motivation can be seen from how their attitude and enthusiasm during the learning activities take place. To see the attitude and enthusiasm of students, teacher can assess how much motivation of students in doing learning activities. To find out more detail how much the motivation of students, teacher can see it from several things such as perseverance students in learning, independence in doing the task, pay attention while the learning process takes place, the desire to succeed, not easy to give up in facing the problems. (Riduwan, 2009, pp. 31-32).

Motivation is important for students in learning activities. This motivation needs to be grown in every learning activity. Teacher can design a learning activity that can generate student learning motivation. However, in reality there are many learning activities that find quite boring for students. One of the learning activities which according to the students boring is learning social science (Suparta, Lasmawan, Marhaeni, 2015, pp. 4, interview results, opinions from Alfarisi VIII C, Elsa VIII D, Indriyani VIII D students SMP Negeri 40 Bandung on Thursday, February 23rd, 2017). It is because the learning activities are only oriented to the material contained in the textbooks and teacher-centered, so there is no learning activity in students themselves. It affects the low learning motivation of students and students feel bored to follow social science learning (Wibowo and Marzuki 2015, p.159; Suparta, Lasmawan, Marhaeni, 2015, p. 3). Based on the problems found in class VIII in social science learning activities, it can be indicated that the main problem arising during the learning activities is the low motivation of student learning. If the motivation of learning in the student is low, it will cause a sense of laziness to learn and do the task of the teacher (Saparwadi, 2015, pp. 65).

Teacher as learning organizer in the classroom has to realize that teacher plays a big role in the learning process. Teacher should be aware of their role, not only to convey information to students but also as facilitators so that students can develop their potential during learning. Teacher can create a quality learning process by providing meaningful learning experiences and can foster student learning culture (Suparta, Lasmawan, Marhaeni, 2015, pp. 2). Therefore, it should be designed a fun learning model where the teacher does not dominate the class. It should exist the interaction between teacher and students in the learning process. One of the learning model that can be used is cooperative learning model make a match technique. Eggen and Kauchak in Trianto (2007, p 42) argue that cooperative learning is a learning model involving students working in collaboration to achieve common goals. Learning model with make a match technique is suitable to improve student's learning motivation (Komalasari, 2011, pp. 120). Applying cooperative models of make a match technique can improve

learning motivation because students are given the opportunity to interact with other students, where classroom learning can be created as a game and there is competition between groups to solve problems related to the subject matter. The implementation of cooperative model of make a match technique can also increase student's learning activity, both cognitively and physically. The implementation of this model is expected that no more students surreptitiously play mobile phone or do other activities that are not learning. Students are required to actively seek out their partners and students can learn to understand the concepts of social science in a fun learning environment.

Based on the background that has been described above, the author is interested in conducting study by raising the title "The Effect of Implementation of Cooperative Learning Model Make A Match Technique Towards Student Motivation in Social Science Learning (Quasi Experimental Class VIII In SMP Negeri 40 Bandung). In general, the purpose of the study is to find out how big the effect of the implementation of cooperative learning model make a match technique to the motivation of the students of class VIII in SMP Negeri 40 Bandung. This study aims to answer some problem formulation as follows: First, is there any difference in student's learning motivation in learning social science after applying cooperative learning model make a match technique?. Second, is there any difference in student's learning motivation in social science learning after the implementation of conventional method?. Third, is there any difference in student's learning motivation that apply cooperative learning model of make a match technique and does not apply cooperative learning model make a match technique in social science learning?

STUDY METHOD

The study method used in this study is a quantitative method with a quasi-experimental approach. Quasi experiment according to Sugiyono (2012, pp. 114) is experiment that has treatments, impact measurements, and experimental units, but does not use random placements. Quasi experiment aims to estimate the condition of variables in circumstances not allowing to control and manipulate all relevant variables. The design used in this study is Nonequivalent Control Group Design. The selection of this design is because the author is unable to strictly control the influx of external variables. The study design can be seen below.

Table 1
Nonequivalent Control Group Design

Groups	Pretest	Treatment	Posttest
Experimental	O ₁	X ₁	O ₂

Class		X ₂	
Control Classl	O ₃	C ₁	O ₄
		C ₂	

Information :

X₁: The first treatment of social science learning using a cooperative make-match technique model.

X₂: The second treatment of social science learning using a cooperative make-match technique model.

C₁: The first treatment social science learning using conventional method.

C₂: The second treatment social science learning using conventional methods.

O₁: pretest is the initial data of students' learning motivation in the experimental class.

O₂: posttest is the motivation to learn students after receiving treatment in the experimental class.

O₃: pretest is the initial data of student learning motivation in the control class.

O₄: posttest student learning motivation after implementation of conventional method in control class.

Sugiyono (2014, pp. 116)

Instrument used in this study is non-test instrument that is questionnaire to measure student's learning motivation. Questionnaire is a list of questions given to others who are willing to respond (respondent) in accordance with user demand (Riduwan, 2009, pp. 71). Dissemination of questionnaire aims to determine the level of student learning motivation before and after implementing cooperative learning techniques make a match in the experimental class and conventional method in the control class.

Reliability test is a measurement showing the consistency of a measuring instrument (Riduwan, 2009, pp. 115-116). Reliability test questionnaire in this study uses Cronbach's Alpha formula. Questionnaire test filled by 30 respondents, the questionnaire declared reliable if the calculation results greater than 0.361 with 5% significance level. Instruments used in the study tested the level of validity using the formula Pearson Product Moment. Testing instrument validity according to Arikunto (in Riduwan, 2009, pp. 97) is a measurement showing the level of reliability or validity of a measuring instrument. Test data normality in this study using Kolmogorov-Smirnov Test method at SPSS 20. Criteria of decision-making can be done based on probability (asymptotic significance). If the probability is ≥ 0.05 then the data distribution is normal whereas if the probability < 0.05 then the data is not normally distributed. The normality of data obtained from the questionnaire of learning motivation before and after treatment in the experimental class and control class can be seen in the following table.

Table 2
Test Results Normality Student Motivation in Experimental Class

		Pretest-E	Posttest-E
N		30	30
Normal Parameters ^{a,b}	Mean	37.37	46.40
	Std. Deviation	3.873	4.280
Most Extreme Differences	Absolute	.165	.122
	Positive	.107	.087
	Negative	-.165	-.122
Kolmogorov-Smirnov Z		.903	.670
Asymp. Sig. (2-tailed)		.388	.760

a. Test distribution is Normal.

b. Calculated from data.

Table 3
Test Results Normality Student Motivation in Control Class

		Pretest-K	Posttest -K
N		30	30
Normal Parameters ^{a,b}	Mean	38.10	46.40
	Std. Deviation	3.575	4.280
Most Extreme Differences	Absolute	.129	.122
	Positive	.104	.087
	Negative	-.129	-.122
Kolmogorov-Smirnov Z		.707	.615
Asymp. Sig. (2-tailed)		.700	.844

a. Test distribution is Normal.

b. Calculated from data.

Homogeneity test is conducted to see the level of similarity of student answers in the questionnaire. Homogeneity test is conducted by using variance test formula or F test, that is One Way ANOVA formula. If the value of significance > 0.05 then it is the homogeneous data whereas if the significance value < 0.05 then the data is not homogeneous. Results of data processing can be seen in the following table.

Table 4
Homogeneity Test Results Student Motivation
Motivation
Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Pretest	.212	1	58	.647

Posttest	.812	1	58	.371
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Hypothesis testing in this study using t-test on SPSS 20 is Independent Sample T-Test. Hypothesis testing is conducted to determine whether or not there are differences in student learning motivation before and after treatments, that is the implementation of cooperative learning model make a match techniques in the experimental class and the implementation of conventional methods in the control class. If the significance value > 0,05 then there is no difference of student's learning motivation before and after done treatment whereas if significance value < 0,05 then there is difference of student's learning motivation before and after done treatment. The result of data processing of students' motivation of experiment class and control class can be seen in following table.

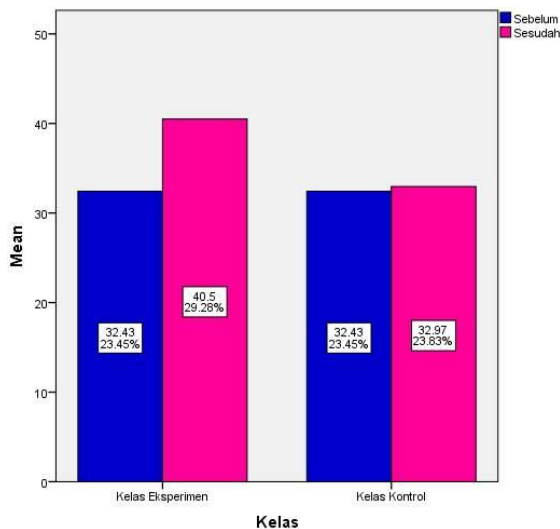
Table 5
Hypothesis Test Motivation Student Learning Class Experiment and Class Control

		t-test for Equality of Means			
		T	df	Sig. (2-tailed)	Mean Difference
Pretest	Equal variances assumed	-.762	58	.449	-.733
	Equal variances not assumed	-.762	57.633	.449	-.733
Posttest	Equal variances assumed	6.079	58	.000	7.767
	Equal variances not assumed	6.079	54.539	.000	7.767

RESULT AND DISCUSSION

The purpose of this study is to find out how much the effect of the implementation of cooperative learning model make a match techniques to the motivation of students in class VIII SMP Negeri 40 Bandung in social science learning.

Graph 1
Motivation Student Learning in Experimental and Control Class



Based on the calculation of questionnaire score, it is known that there is difference of mean of student's learning motivation before and after implementation of treatment in the experimental class, that is by applying cooperative learning model make a match technique. Prior to the treatment, the average learning motivation of students in the experimental class is 32.43 and after treatment, the average of student learning motivation increased to 40.5, while there are not many differences about student's learning motivation in the control class students that the average before being treated is 32.43 and after given treatment, the average of student learning motivation is 32.97. The average score before the treatment in the experimental class and control class has the same average of 32.43, because the social science subject has not implemented cooperative learning model of make a match technique. Whereas after implementation of make a match technique in the experimental class, mean of student learning motivation is bigger than control class which do not apply make a match technique. This proves that the implementation of cooperative learning model make a match technique in learning social science class VIII on the material tax system affect the student's learning motivation.

Learning motivation is not easy to grow, so the efforts need to be able to cause the students desire to cultivate the motivation. Therefore, teacher as parents of students at schools has a big role in fostering student learning motivation. One of the efforts that can be done by teacher to foster student's learning motivation is by making the learning atmosphere fun through the implementation of various learning model. The implementation of various learning model needs to be done because according to Dimiyati and Mudjiono (2009, pp. 97) one of the factors that can influence student's learning motivation is the existence of dynamic elements in learning. A monotonous learning atmosphere can make students bored with the learning process and students are not interested in learning the

material. The implementation of cooperative learning model of make a match technique has been proven to foster students' learning motivation because this technique is fun and there are elements of play in its implementation (Komalasari, 2011, p.201; Uno, 2009, p.35). The increase of student learning motivation is seen from the fewer students who play mobile during the lesson. No students sleep when the teacher explains the material and the number of students who listen to the material explanation from the teacher and record the material rather than talking with friends is increasing. It can also be seen that the students will approach the desk of the teacher and ask to be re-explained the material that is not understood. This shows that students have a desire to try to find out the unintelligible material and show courage to ask people who understand the material better. The results of this study are in line with the opinions expressed by Riyanto (in Rahmawati and Suprihatiningrum, 2014, pp. 132) which states as follows:

The implementation of cooperative learning model of type make a match shows high motivation which is characterized by the accuracy of looking for partner, good cooperation in doing task, courage in presenting result, argue and ask.

The increase of student learning activity is also seen during make a match implementation where students look enthusiastic looking for each partner's card. Students try to find the pair of cards before the card-end time limit expires. The existence of deadline in the implementation of make a match technique is one way to train students' discipline in respecting time (Komalasari, 2011, pp. 120). Student's discipline in using time is also seen while performing individual tasks. When getting the question, students immediately do the tasks and when it has finished, the students do not procrastinate to collect tasks to the teacher. The increase of student learning activity is an indication of the increasing motivation of student learning and in accordance with the results of research from Lestina, et al (2013, p.4) which argues as follows.

Make a match technique learning model is more interesting learning process and makes most students more enthusiastic to follow the learning process. Student activeness can be seen at the time the students looking for their pair of cards. Indication of the increase in student learning motivation can also be seen from the percentage of liveliness and student learning outcomes.

The control class as a comparison class in the social science learning process in this study is given treatment using conventional method. After the implementation of conventional methods, students' learning motivation does not increase. Learning by

listening to the explanation of the teacher and not involving the students to participate actively in the learning can cause a sense of boredom in students, so that students are not interested in learning and choose to do other activities that can repel boredom. Lasmawan (2010, pp. 128) states the lack of conventional methods of student learning motivation as follows.

Condition with conventional learning model dominated by lectures will place the teacher as a source of information (Teacher Center) so that students are only as the object of learning that receives knowledge from teacher. Such learning conditions do not support students in improving their learning motivation in order to achieve optimal learning outcomes.

Therefore it can be concluded that the implementation of conventional methods has not been able to improve students' learning motivation in social science learning in taxation material. When students are tired of listening to the material from the teacher, students will choose to do non-learning activities. The implementation of cooperative learning model of make a match technique can be concluded to improve students' learning motivation in social science learning by increasing student activity in learning such as increasing number of students who are able to give opinion or argue and increasing number of students who dare to ask questions related to material that is not understood. The implementation of cooperative learning model of make a match technique gives the opportunity for the students to do various activities and the learning process is not only limited to the listening activity of material explanation from the teacher. Lasmawan's statement (2010, pp. 128) which states the implementation of conventional methods does not support students in improving their learning motivation, reinforces the results of this study that the implementation of cooperative learning model make a match technique is better than conventional methods in reminding students' learning motivation in social science learning.

CONCLUSION AND SUGGESTION

Based on the findings, data analysis and discussion of the results of study, it can be concluded: First, there are differences in student learning motivation before and after the implementation of cooperative learning model make a match techniques in the experimental class in social science learning in SMP Negeri 40 Bandung. Student's motivation to study social science is higher after the implementation of make a match techniques in the process of learning taxation material. Second, there is no difference in students' learning motivation before and after the implementation of conventional methods to the control class. The

implementation of conventional methods that are dominated by teacher is less suitable to be applied in the social science learning process especially on the material of the taxation system in Indonesia, because in this material the concepts must be understood by the students quite a lot and the students also have to practice how to calculate the tax rate, so if the teacher only apply conventional methods, students will feel bored. Third, there is a difference between students' learning motivation in the experimental class applying cooperative learning model of make a match technique and control class which does not apply make a match technique.

The results of this study recommend that make a match technique has been tested as one of social science learning techniques for other materials. Indicator of learning motivation that has increased but not significant is the number of students who ask answers to teacher when working on the problem and few students give their opinion. In addition to teaching the material, it is advisable for teacher to foster self-confidence to the students so that students know their ability and are not shy to express opinion when learning social science.

During the research process there are obstacles encountered such as the difficulty of arranging students to set the class condition conducive. However, these obstacles can be overcome by gift giving so that students are stealth out of the classroom as learning becomes lessened. The author thanked Drs. Muhamad Sukarno who has helped to conduct the study, to Dr. Mamat Ruhimat and Dr. Murdiah Winarti is willing to take the time to provide direction during study and thesis preparation, as well as to parents who always provide support to author.

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