

# The Application Of *Make A Match* As A Model Of Cooperative Learning To Improve Students Learning Achievement In The Learning Of Locomotor Organs In Animals And Human Beings To Grade V Students Of Sekolah Dasar Lab School UNNES

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**Abstract**—At grade V students of V SD Labschool UNNES *Make a Match* as cooperative model had not been applied, so that the students did not have the best learning achievement, interaction during was not so good, and the students tended to be uninterested during the learning. This study aims to find the learning activities and the improvement of the students learning achievement through cooperative learning mainly *Make a Match*. By learning in pairs, the learning becomes more fun. The students think together through cooperative learning mainly *Make a Match* which has impact that the students could solve the hard problem. This is Classroom Action Research which applied Kurt Lewin type which was implemented through four main stages, i.e.: planning, action taking, observation, and reflection. The study shows that the students learning activities improved that can be viewed from the improvement of students' disciplines in terms of doing the assignments, self-confidence, inter-student interactions became more harmonious and more fun, and the bad habit in the classroom got lessening. The improving activities have positive impact on the improvement of the students learning achievement.

**Keywords**—*learning activities, learning achievement, cooperative learning i.e make a match.*

## I. INTRODUCTION

Education is conscious and planned efforts to create the learning atmosphere and process in order that the students can actively develop their potentials in order to have spiritual and religious power, good self-control, personality, high intelligence, good attitudes, as well as the necessary skills for himself, communities, nations, and the state. Those learning objectives are objectified through learning improvement process covering the teachers' role, the students activeness, and the learning outcomes. That can be found in Republic of Indonesia Act 20/2003 Article 1 on National Education System.

The learning objectives under Permendikbud 22/2016 are good. In fact, however, there are many milestones to achieve those objectives. It was shown by

the science scores achieved by Indonesia in PISA (*Programme for International Students Assessment*) in 2015, i.e. 403, in which Indonesia ranked 62 out of 70 countries..

The sub-optimum Natural Science learning outcomes were found in SD Labschool UNNES, Semarang City, too. The sub-optimum grade points for Natural Science subject were shown by the grade points of lesson exercises (UH) in SD Labschool UNNES Semarang kelas V. Some students did not meet the minimum mastery criteria. 6 students (30%) of 18 did not meet mastery criteria. Based on the observation and the interviews with the teacher of grade V in SD Labschool UNNES Semarang, the scientific approach has been applied to the learning. It, however, had not been supported with innovative learning as included in Permendikbud 24/2016 that the learning should promoted by *discovery learning, project based learning, inquiry learning dan cooperative learning.*

Therefore, in order to find one strategic measure of the Natural Science learning, the effective learning model was applied to fulfill the primary students needs, i.e. Cooperative Learning named *Make A Match*. *Make A Match* is a learning model developed by Loma Curran. The main characteristics of *Make A Match* is that the students are asked to find a pair of cards which are the answers to or the questions regarding the certain lesson materials in the learning (Shoimin, 2014: 98). By applying *Make A Match* the students can both find the pair and learn a lesson material or a topic. *Make A Match*, as a learning model, involves the students completely because the teacher just leads the discussion in terms of matching the students' answers.

*Make A Match* model is applicable for the Natural Science learning mainly Locomotory Organs in Animals and Human Beings. Through *Make A Match* model, the students learn by finding the match of a card.

It makes the students active and interactive as the students are going to try to find the match for the card that they have respectively. The card containing the upper limb bone is paired with the function of each limb bone.

Based on the explanation above, I determine that the title for the study is 'The Application of Make A Match as A Model of Cooperative Learning to Improve the Students Learning Achievement in the Learning of Locomotory Organs in Animals and Human Beings to Grade V Students in Sekolah Dasar Labschool UNNES (Penerapan Model Kooperatif Make a Match untuk Meningkatkan Prestasi Belajar Siswa Tema Organ Gerak Hewan dan Manusia di Kelas V Sekolah Dasar Labschool UNNES)'. Locomotory Organs in Animals and Human Beings Theme consists of Sub-Theme 1, Sub-Theme 2 and Sub-Theme 3. The learning was carried out in two cycles, each of which consisted of two lessons. Cycle 1 for Theme 1, Sub-Theme 2, part 2 and part 5, while cycle 2 was for Theme 1, Sub-Theme 3, part 1 and 2. In this study, the analyzed learning assessment focused on Natural Science as learning content.

## II. METHODS

The conducted Classroom Action Research was the one developed by Kurt Lewin conducted through four main phases, i.e.: planning, action taking, observation, and reflection as what has been described (Fitrianti, 2016: 29). Those cycles were repeated continuously until the targets are achieved. Research location is the place where the research was conducted. The study was conducted in SD Labschool UNNES. This study was conducted from August 1, 2018-Augustus 30, 2018. The research was conducted during the odd term in 2018/2019 academic year.

Subjects in this research were 18 Grade V students in SDN Labschool UNNES. In this research, the data regarding the research title is collected by using the research instruments or tools in forms of test and observation sheets.

There are two aspects in the students learning mastery assessment, i.e.: individual assessment and collective assessment. Referring to Guidebook to Learning Implementation in SD Labschool UNNES for grade V students, the student is indicated as meeting the learning mastery if his grade point is 70 or more. Then the grade point of each individual was calculated. If 85% of the students meet the mastery learning criteria, then the classroom can be stated as meeting the classroom learning mastery.

## III. RESULTS AND DISCUSSION

1. Descriptive analysis of the learning achievement before applying Cooperative Learning called *Make a Match*. Based on the descriptive analysis of the pre-test, the students learning achievement before applying Cooperative Learning mainly *Make a Match* Model is shown in the following Table 1:

**Table 1** Statistics of Students Mastery Scores before Applying Cooperative Learning mainly *Make a Match* Model

Statistics	Score of Statistics
Subject	18
Ideal Score	100
Maximum Score	75
Minimum Score	50
Score Range	25
Average Score	68

Table 1 above shows that the average score for Natural Science learning achievement before applying Cooperative Learning mainly *Make a Match* Model was 68 out of the ideal score, i.e. 100. The number of students who met the mastery criteria is 11 or only 61% of total number of students, while those who did not meet the mastery criteria were 7 students or 39 % of total number of students. The maximum grade point the students got in the pretest was 75 and the minimum one was 50.

2. Descriptive analysis of the posttest results of cycle I
  - a. Action Planning

In the implementation of the research, all the needs concerning the research were prepared in advance, i.e.: pretest dan posttest materials, Lesson Plan, observation sheets, and the other supporting tools such as teaching aids. In this cycle, I designed two lessons.

- b. Implementation

### First Cycle in Lesson 1 and 2

In the first cycle comprising lesson one and two, the grade V students started being delivered with lesson materials of Theme 1 Sub-Theme 2 Part 2 and Part 5 by applying Cooperative Learning mainly *Make a Match* Model. I provided the cards containing the questions and answers the number of which is the same as number of students. Through *Make A Match* model, the students did the learning by finding the match for his card. It makes the students active and interactive because the students will try hard to find the match for the card that he has. The upper limb bone card were matched with the cards containing functions of each upper limb bone. The lower limb bone cards were matched with the cards containing functions of each lower limb bone. In the end of the lesson, the pair students who held the questions and answers cards regarded as match were found. In the end of the cycle, the students were tested..

### Second Cycle of Lesson 1 and 2

In the second cycle consisting of lesson 1 and 2, the students were delivered with lesson materials of Theme 1, Sub-Theme 2, Lesson 1 and 2. In the second cycle, I provided the cards containing the questions and answers the number of which is the same as number of students. In the end of the lesson, the pair

students who held the questions and answers cards regarded as match were found. I also adapted the students to this method in advance in order to run in line with its measures.

In the end of cycle 2, I gave the student who found the match card fastest a gift. Not much different from the previous lesson, the students were delivered with the lesson materials by applying Cooperative Learning mainly *Make a Match* Model and exercises as evaluation to cycle 1.

c. Observation

The followings are the data we collected from observation:

- 1) In the first cycle in lesson 1, the students looked more enthusiastic than before. They were happy with the provision of the cards as the supporting media. I still need more efforts to manage the students because this is the students' first experience, i.e. acquiring the lesson materials by applying Cooperative learning mainly *Make a Match* Model.
- 2) In the first cycle in lesson 2, the students looked more ready to receive Natural Science, Indonesian, and Art, Culture, and Craftsmanship lessons. The students enthusiastically waited for my instruction to begin the lesson. The question and answer cards that I provided were made of cartons in various eye-catching colors. The students looked happy competing to find their match. The formed matches soon automatically went to the provided corner of the classroom
- 3) In the cycle 2 lesson four, I asked questions about the students' feeling about Cooperative learning mainly *Make a Match* Model. They almost simultaneously said that they loved this method. In the end of learning of lesson four, I gave the students quiz regarding the lesson materials.

d. Reflection and Evaluation

From the observation in the first cycle, I draw a conclusion that this method is effectively applicable to the classroom learning. The students enthusiastically studied, unlike the previous times. From the learning outcomes, however, the collective learning mastery had not been achieved yet in this cycle, thus I think that it was necessary to continue the study to the second cycle.

In this cycle, test of learning achievements was run in the form of partly exercises. The minimum mastery criteria for Natural Science subject for grade V students in SD Labschool was 70. Meanwhile descriptive analysis of the grade points the students acquired after applying Cooperative Learning mainly *Make a Match* Model during cycle 1 is presented below:

**Table 2.** Statistics of Students Mastery Scores in Test of Cycle I

Statistics	Statistics Scores
Subject	18
Ideal Score	100
Maximum Score	88
Minimum Score	68
Score Range	20
Average Score	83
Number of Not-Mastering Students	1
Number of Mastering Students	17

Table 2 above shows that the average score of learning achievement in Natural Science subject after applying Cooperative Learning mainly *Make a Match* Model in cycle 1 was 83 of ideal score 100. The average grade point the students got in the test of cycle 1 improved in which the average score improved from 68 in pretest to 83 in cycle 1 test.

If the students' ability to answer the questions in the cycle 1 test was analyzed, then the percentage of the students learning mastery in the test of cycle 1 was that the students did not master. It shows that in cycle 1 test the percentage of students mastery was 94% or 17 of 18 students was included into "mastering" category. A small part of the students, i.e. 1 student (6%) was included into "not mastering" category. It means that of 18 students, there is a little part that was below mastery and needed remedial in cycle.

From the end results of cycle 2, lesson 1 and 2, the data analysis showed that grade V students in SD Labschool UNNES 2018/2019 passed the mastery criteria, both individually and collectively.

Percentage of the improvement of the students learning achievement can be presented below:

- 1) Based on the students average classroom grade point, consecutively from pre-cycle, cycle I, and cycle II, i.e. 83, the student passed the mastery criteria..
- 2) Based on the mastery learning grade point, consecutively from pre-cycle, cycle I (94 %) and cycle II the students master 100%

**IV. CONCLUSION**

The conclusion drawn from all the preceding discussions which also solve the problems are:

1. The students learning activeness improved well by applying Cooperative Learning mainly *Make a Match* Model.
2. Cooperative Learning mainly *Make a Match* Model had positive impact which can be viewed from the improvement of the students learning achievement. It was marked with the improvement of the students

classroom average point, the fulfillment of the minimum mastery criteria both individually and collectively.

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