# The Implementation of Talking Chips and Fan-N-Pick Cooperative Learning Model to Improve Students' Motivation and Learning Outcomes

# Petrus Logo Radja<sup>1</sup>, Budi Eko Soetjipto<sup>2</sup>, Achmad Amirudin<sup>3</sup>

Department of Basic Education, Graduate Program of Universitas Negeri Malang, Indonesia

Abstract: This study is aimed to describe how Talking Chips and Fan-N-Pick learning model to improve VIII D class students' motivation and learning outcomes at SMP Kristen Citra Bangsa Kota Kupang. The study is a Classroom Action Research (CAR) study. The study consists of four phases, i.e. plan, action, observation, and reflection. The phases in CAR are conducted in 2 cycles. The subject of the study is 20 VIII D class students of SMP Kristen Citra Bangsa Kota Kupang. The collected data consists of students' motivation and learning result test. The result of the study shows that there is an improvement on students' motivation in the first cycle and the high criteria is improved to very high criteria in the end of the second cycle. The improvement is also occurred in students' learning outcome and implementation whether it is from the students or the teacher.

Keywords: Talking Chips, Fan-N-Pick, motivation, and learning outcome

#### I. Introduction

Learning process in the classroom obviously determine students' motivation and learning outcome. It is common that teachers are stuck with conventional teaching such as lecture method. Lecture method is a simple method because of the application does not need any special preparation (Harsono, 2009). In the implementation of lecture method, the teacher became the one and only learning resource and the students became listeners. This is in accordance with the opinion of Giistrap and Martin (1975) which stated that lecture is derived from the word *lecture* which means teacher is presenting the subject by reading the book and dictate the students. This monotone learning is noticeably affecting students' motivation and learning outcome.

Students' activity in the class is only listening to the teacher and doing works that was given. Students are just directed to memorize information without correlating it with the daily life, as the result, students are good in theory but not good enough in applying the information in the daily life (Sanjaya, 2006:1). Based on the observation that has been done by the researcher, facts that were obtained relating to Social Science learning in Citra Bangsa Christian Junior High School are as follows: 1) the learning process is still dominated by lecture method, 2) VIII D class students has low motivation that was indicated by students attitude while the teaching and learning process is taking place, such as chit-chatting, playing around, joking, doing off-task activity, and even sleeping. 3) VIII D students had the lowest learning result in social science. According to the problems that has been found in the learning process, teachers are expected to be able to find an accurate solution to handle the problem. An effective teacher is a teacher that can choose, understand, facilitate, and implement a good teaching model and also be able to involve students in the learning process (Varghese, 2009; Anthony & Walshaw, 2009). The appropriate model to be implemented by teachers in dealing with the problem is a cooperative learning model. In the execution, cooperative learning model has to group 4-5 participants heterogeneously. The teacher plays role as a facilitator and the students receives instruction from the teacher. Then, the students discuss with their group mates and the teacher evaluate their learning outcome by an accumulated mark (Yeung et al, 2015).

Students' understanding could be improving because cooperative learning is carried out based on social life such as teamwork that can improve students' motivation, productivity and learning outcome (Solihatin, 2008:5). In the implementation of cooperative learning model, every group member possesses positive interdependency onto each other that can trigger them to actively cooperating in the group (Tran, 2014). With the previously mentioned problem, cooperative learning serves an interesting, meaningful, and challenging learning atmosphere in which students' motivation and learning outcome can be improved (Andreas & Gabriel, 2010). The learning model which can be implemented by teachers in the classroom are Talking Chips and Fan-N-Pick. Talking Chips is a learning model developed by Spencer Kagan.

## **II.** Literature Review

According to Oktaviana (2014), in the implementation of Talking Chips every group members are holding chips which has to be used before talking such as questioning, answering question, hesitating, uttering ideas, clarifying, or classifying. Fitri et al (2016) stated Talking Chips consists of two social processes i.e. social process and material comprehension process. Social process is a process in which students are working in a

group and mastery of the matter process is a process that involves students in a discussion, concept clarification, and problem solving. Then, according to Sugiyono (2010: 57), Talking Chips is a learning model which build interdependency or reciprocal relationship between the group members consequence by the same existing objective. The intended reciprocal relationship is an interdependency in the group in order to answering questions and uttering ideas or arguments to reach the learning expectation.

In the implementation of Talking Chips, students can be motivated because they are gaining the same treatment and chance to apply this model (Hariyanto, 2015: 1001). The advantage of Talking Chips according to Aravah (2014) is that talking chips can engage students to speak up and utter their arguments in fun situation.

The syntax of Talking Chips are described as follows; 1) teacher prepares small box with buttons inside, 2) students are given 2 or 3 buttons before the teaching and learning process, 3) a student have to put one of his/her button on his/her group table after giving his/her arguments, 4) if a student's button runs out, he/she must not speak until all of his/her group mates are also run out of button, 5) if all of the buttons are emptied while the task hasn't finished yet, the corresponding group may take chance to once again distribute the buttons and repeat the procedures.

Fan-N-Pick is a learning model using question cards as the learning media. According to Kagan (2009: 624), Fan-N-Pick has function to form group, skills in socializing, and build students understanding and thinking capability. These four function of Fan-N-Pick are useful in developing social skill and students' knowledge. The advantage of this learning model is to engage students to exchange information, gaining new knowledge and teaching something to the others so the students are better in understanding the subject (Hakim, 2012: 99). In Fan-N-Pick, each student has same chance to ask questions, answer questions, and deciding whether an answer is right or wrong. Hence, students do not feel differentiated and motivated to learn. (Kristiana et al. 2012).

Steps in Fan-N-Pick model are described as follows; 1) the first student holds the question cards like fan-shape, 2) then the second student choose the card, read the question aloud, and give 5 seconds for the third student to think, 3) the third student answer the question, 4) the fourth student respond the answer, and 5) the students start the new round on clockwise.

Both model, Talking Chips and Fan-N-Pick, are appropriately used by teachers to improve VIII D class students' motivation and social science learning outcome at SMP Kristen Citra Bangsa Kota Kupang. Weak learning motivation of VIII D class students could be seen on the learning process. In the learning process, students are mainly off task, ignoring teacher's explanation, talking to each other, and even sleeping. Motivation, according to Sardiman (2006:73), is a locomotion from within to do an activity in order to reach the point. The definition is also accordance with Clayton et al (2010) who stated that motivation is closely related with students' achievement.

Besides increasing motivation, the other matter that underlie the use of Talking Chips and Fan-N-Pick in this study is to improve students' learning result in social science in which the classical standard of competence is still below 80%. Learning outcome is change of behavior which is gained after learning that involves cognitive, affective, and psychometric (Sudjana, 2009:3). According to Suhendri (2011:32), learning outcome is a change of knowledge, sustainable, dynamic, observable and measurable behavior. Learning outcome will be seen by change of knowledge and behavior which keeps improving. According to Sudjana (2014:22), learning outcome is capability that is gained by students after experiencing their learning. Based on Sudjana's statement, it can be concluded that learning outcome which is achieved by the students are the result of teacher's treatment in the learning process. According to Lindgren (Suprijono, 2009:7), learning outcome involves proficiency, information, understanding, and manner. The silver lining from Lindgren's statement is that behavior change on the whole is not coming from one human proficiency aspect only.

Some previous research relevant with this study is that had been done by Riyadi (2016) entitled *The Implementation of Cooperative Learning Model Fan-N-Pick and Quick on the Draw to Enhance Social Competence and Cognitive Learning Outcome for Social Studies*. The result of Riyadi's study showed that the application of Fan-N-Pick and Quick on The Draw cooperative learning model is positively improved students' social skill and social science learning outcome.

A study by Masikem (2016) about *The Implementation of Cooperative Learning Model Talking Chips and Quick on The Draw to Enhance Motivation and Social Studies Learning Outcome* also resulted in a conclusion that Talking Chips and Quick on The Draw cooperative learning model can improve students' motivation and learning outcome in learning social science.

The underlying problems of this study are; 1) how Talking Chips and Fan-N-Pick cooperative learning model is the implementation in social science learning of VIII D class students at SMP Kristen Citra Bangsa Kota Kupang, 2) how the implementation of Talking Chips and Fan-N-Pick can improve VIII D class students' motivation on learning social science at SMP Kristen Citra Bangsa Kota Kupang, and 3) how the implementation of Talking Chips and Fan-N-Pick can improve VIII D class students' social science learning outcome at SMP Kristen Citra Bangsa Kota Kupang.

#### III. Method

This study is Classroom Action Research (CAR) which has two cycles. Each cycle contains four phases i.e. planning, acting, observing, and reflecting (Arikunto, 2011). The implementation of Talking Chips and Fan-N-Pick is done one after another. The Talking chips is applied in the first meeting and Fan-N-Pick in the second meeting. This study took place from January up to February 2017. Students which participated in this study was twenty students of the eight grade students of SMP Kristen Citra Bangsa in Kupang. This study took place in January to February 2017 resulting eleven meetings.

The data is gained from students' motivation questionnaire, learning outcome test, learning implementation observation sheet from the teacher and students, and documentation. The data collected from the first cycle, then, is used as evaluation for the second cycle.

#### IV. Result

This study is conducted in two cycles. First cycle was done in six meetings and second cycle was done in five meetings. The overall learning activity in Talking Chips and Fan-N-Pick has been good. This is proved by the following table

Table 1. Improvement on Learning Implementation of the teacher in Cycle I and Cycle II

Cycle	Average (%)	Criteria	Increase (%)	
Cycle I	78,75%	Good	2 120/	
Cycle II	81,87%	Very Good	3,12%	

Table 2. Improvement on Learning Implementation of the students in Cycle I and Cycle II

Cycle	Average (%)	Criteria	Increase (%)	
Cycle I	77,18 %	Good	6,25 %	
Cycle II	83,43 %	Very Good		

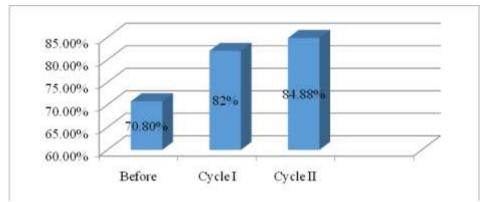
Table 1 and 2 shows that the learning implementation of the teacher and the students are giving good improvement.

From the first cycle, the learning implementation has been doing well even though there are students who still don't understand and perform the steps correctly. Nevertheless, the learning implementation percentage of the teacher from cycle I gained 78.75% and the learning implementation of the students gained 77.18% which is classified as good criteria. In cycle II, the learning implementation of the teacher and the students had gone better than in cycle I. the percentage of the learning implementation of the teacher has increased to be 81.87% and the learning implementation of the students has increased to be 83,43% which are classified as vary good criteria.

**Table 3.** Students' learning motivation improvement

No	Indicator	Pre-act percentage	Percentage in the end of Cycle I	Percentage increase	Percentage in the end of Cycle II	Percentage Increase
1.	Attention	69,61	77,50	7,89	85,60	8,1
2.	Relevance	71,44	77,20	5,75	83,50	6,3
3.	Confidence	66,66	72,20	5,54	83,10	10,9
4.	Satisfaction	75,00	82,00	7	87,20	5,2
	Average percentage	70,08	76,75	6,67	84,88	8,13

The following diagram describe the increase of students' motivation



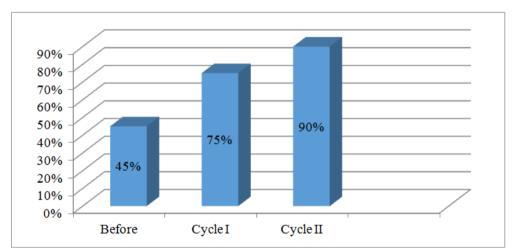
**Graph 1.** Students Motivation Increase Diagram

Table 3 and graph 1 showed the implementation of Talking Chips and Fan-N-Pick cooperative learning model that can increase students' motivation. In the first state before the act, students' motivation reached 70.80%, increased to 82% in Cycle I, and then kept increasing to be 84.88% in the end of Cycle II.

Table 4. Students' Learning Outcome Improvement from before the Act Cycle I, and Cycle II

		1				
•	Success Percentage		Increase	Success	Increase	
Activity	Before act	Cycle I	percentage	percentage in Cycle II	Percentage	
Learning Result	45%	75%	30%	90%	15%	

The increase of students learning outcome also described in the following diagram



Graph 2. Students' Learning Outcome Increase Diagram

Table 4 and Graph 2 shows that Talking Chips and Fan-N-Pick model can improve students' learning outcome from the before act state which has success rate of 45% become 75% in the end of cycle I and keep increasing to 90% in the end of Cycle II.

#### V. Discussion

The implementation of Talking Chips and Fan-N-Pick has been proved to be successful to improve students' motivation. The measurement which has been done to determine students' motivation in the implementation of Talking Chips and Fan-N-Pick was by using motivation questionnaire sheet. The indicators in the motivation questionnaire are attention, relevance, confidence, and satisfaction. Motivation questionnaire was distributed to the students in the preliminary study, end of cycle I, and end of the cycle II. The result of the motivation questionnaire in the preliminary study is 70.08% which is classified as high criteria, the second motivation questionnaire which was distributed in the end of cycle I gained 76.75% which is classified as high criteria, and the last motivation questionnaire which was distributed in the end of cycle II gained 84.88% which is classified as high criteria.

Based on the data analysis in motivation which had gained, the conclusion that can be infer is that the implementation of Talking Chips and Fan-N-Pick in social science learning can improve students motivation. The increase of the students' motivation was not merely from within the students but also came from outside factor an accordance with the opinion of Mappease (2009:3) who stated that motivation can come from within which is called intrinsic motivation and come from outside which is called extrinsic motivation. Motivation from the outside which is being discussed is the implementation of Talking Chips and Fan-N-Pick that engage the students to study more. Other than that, Talking Chips and Fan-N-Pick learning model can improve students' motivation because both models offer new ways of learning so the students are encouraged to learn in good mood. This is also in correspond with Sjukur (2012:371) statement who said that motivation shows students' tendency to be involved in an interesting activity and enforcing students to improve their capacity. Uprising motivation will also increase learning outcome as Anggraini (2013:189) stated that students' high motivation gives students satisfying learning outcome.

The implementation of Talking Chips and Fan-N-Pick has been proved to be able to increase students' learning outcome. Students' learning outcome which is measured is the cognitive learning outcome. The measurement is using learning outcome test in the preliminary study, in the end of Cycle I, and in the end of Cycle II. In the preliminary test, 9 out of 20 students (45%) gained  $\geq$ 70. The learning outcome in the end of Cycle I showed that 15 students (75%) passed the criteria of success. The learning outcome in the end of cycle II showed that 18 students (90%) passed the criteria of success. The increasing learning outcome is in accordance to Harsono (2009:72) who said that learning can brings out changes to students potentially or actually.

#### VI. Conclusion And Recomendation

Talking Chips and Fan-N-Pick learning model can improve students' motivation and learning outcome. Increasing students' motivation, besides being proved by the questionnaire, can also be proved by students' behavior which is enthusiastic in enjoying the learning process. Students are also become more confident in arguing and asking unlearned things about the subject. The positive motivation change significantly affects students' learning result.

Based on findings, it is recomended that this Talking Chips and Fan-N-Pick learning model can be used as a learning model for the teachers to improve the students' motivation and social science learning outcome. Besides, this model should be explained in details so that the students understand and apply it well. For further researcher, this model can be used as reference to do the same study in relating to the implementation of Talking Chips and Fan-N-Pick learning model in improving the learning quality in classroom.

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