# STUDENTS LEARNING OUTCOMES THROUGH COOPERATIVE LEARNING MODEL OF THINK PAIR SHARE TYPE AND CONVENTIONAL LEARNING ON 5TH GRADE'S FRACTIONS MATERIAL OF ELEMENTARY SCHOOL 16 IN BANDA ACEH

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**ABSTRACT**

*The purpose of this study is to determine whether students are taught by using cooperative learning model of TPS type get better score compared with students taught by using conventional learning on fractional material in SD Negeri 16 Banda Aceh. The hypothesis in this research is the result of student learning on fractional by using cooperative learning model of TPS get better score than student learning result by using conventional method. The approach used in this study is quantitative with the type of experimental research. The population in this study is all students of class V in SD Negeri 16 Banda Aceh. The sample in this study consists of two classes, namely class V-A and V-B, each class consists of 30 students. The test is used as a tool in collecting data. The data obtained were analyzed by using t-score formula. The result of data analysis showed that the students' ability on fractional materials by using Think Pair Share is better than student' score who taught by using conventional method. The average grade of V-A students taught by using the think pair share model is 81.70 and the average grade of V-B students taught by conventional method is 73.90. The analysis shows that t-score = 2.62 and t-table = 2.00, thus t-score > t-table and concludes that the alternative hypothesis (ha) which states the student's score on fractional materials by using model Cooperative learning of TPS is better than student learning outcomes using conventional learning is acceptable.*

**Keywords : -** Students'Ability, Think Pair Share

## 1. RESEARCH BACKGROUND

Mathematics is taught from elementary school (SD) to college. It is because the quality of teaching mathematics has a dominant role for the progress of the nation education. Sanjaya (2011: 209) states in elementary school, reinvention is expected occurs in learning mathematics. Reinvention is finding an informal settlement in classroom learning. Therefore, in learning mathematics there must be a link between the previous student's learning experience with the concept to be taught.

Mathematics taught in elementary level has many subjects that are regulated in Kurikulum Tingkat Satuan Pendidikan (KTSP). Material multiplication and division is one of the materials taught to students of fifth grade. This material is one of the difficult materials to be masteres by students.

Based on the preliminary research at SDN 16 Banda Aceh, it indicates that most of the students cannot master mathematics well. The students got score around 40 to 60 of 70 Kriteria Ketentuan Minimum (KKM). It is concluded that they could not pass the test competency. There were some problems concerns to low ability of the students in mastering mathematics. The first problem was the students were not active in learning. The second problem was the method used by teacher. The researcher found that the teacher the students by conventional method. The students gained knowledge just from the teacher's explanation. In this method the teacher explains the material and the students listen it. Then, he asks the students to answers the questions based on the text individually.

Besides, the students only focused to their teachers' teaching and did not explore the knowledge by themselves. The teaching learning process also mostly focused on the individual learning. The students did not involve learning in a group. They learnt and solved their learning problem individually without interaction with others. These cases make students bored and they were not enthusiast in learning. As the result, learning process looks clumsy, passive, and uncommunicative so it affects their lower scores.

Therefore, to solve the students' problem in learning mathematics, the teacher should use an appropriate strategy. Think pair share based on cooperative learning can be applied in teaching math. It improves the students' ability in comprehending the meaning in the text by learning actively in a group. In addition, they also share and get the meaning of the material from other members in group.

Based on the above problems, the writer applied the model of Cooperative learning, namely Think Pair Share (TPS). Lie (2010 : 59) states that TPS technique encourages students to improve their spirit in learning cooperatively. The formation of heterogeneous cooperative groups is done by seeing former student learning outcomes". Huda ( 2011: 138 ) states that in a TPS the teacher can give students the chance to share ideas with each other and consider the most appropriate answer. This makes the learners more motivated when the learning process is running, they are more active in asking and answering questions". They also do not feel bored even most of the students are very interested in learning, this is due to their natural learning situation is not the same as usual, where teachers only teach theory in the classroom using the conventional method, without giving an opportunity to the students to discuss and exchange mind.

## 2. REVIEW LITERATURE

Think Pair Share is one of the learning model based on cooperative learning. Trianto (2010: 81) states that this learning model developed by Frank Lyman et al from the University of Maryland in 1981 as one of the structures of cooperative learning activities.

Similar opinion were expressed by Abraham, et al (2000 : 66) which states that the Think Pair Share is a type of cooperative learning that is designed to influence the patterns of student interaction and requires the student to work to help each other in small groups (2-6 members) and more detailed by award cooperative, rather than individual awards. Lie (2010: 32) states that the learning model Think Pair Share involves students actively in the discussions and share your opinions with friends in the group about the material being studied or given by the teacher.

**2.1 Characteristics of Think Pair Share (TPS)**

Think Pair Share (TPS) based on cooperative learning has its own characteristics. Isjoni (2009 : 78) states that the main characteristic of the cooperative learning model Think Pair Share are three main steps undertaken in the learning process. That step think (think individually), pair (pair up with a friend bench), and share (share answers with other couples or the whole class). It is as described by Trianto (2010: 81) that the characteristic Think Pair Share are as follows:

- Think

  In this stage, the teacher filed a statement or problems associated with learning , students are assigned to think independently about the questions or issues raised. In determining the time limit at this stage the teacher should consider the student's basic knowledge to answer the questions given . The advantages of this stage is the technique of " time " or time thinking that gives an opportunity to the students to think about their answers before the question is answered by another student . In addition , teachers can reduce the problem of the existence of students who speak , because each student has their own job to do.

- Pair

  The second step is the teacher assigns students to pair up and discuss about what they think . Interaction during this process can produce answers together . Each pair of students were in discussions about the results of their answers in advance so that the results are better because the students got additional information and solving other problems.

- Share

  At the end of this step the teacher assigns the pairs to share their thoughts with the results of another couple or with the whole class. In this step would be more effective if teachers around from the other spouse is a pair. Step share is a refinement of the steps being before , in the sense that these steps help all groups to become more understanding of the problem-solving explanations given by other groups.

**2.2 Procedures / Steps of TPS**

Based on the opinions expressed by Huda ( 2011: 136-137 ) , the procedures in this study were as follows :

- The teacher divides the students in working group
- Teachers divided reading text to each group
- Each student read and understands the text given by the teacher
- The teacher asks the students to discuss with a partner in the group, and to share and exchange ideas about the text that has been read.
- Students are back in the group and discuss the text read back together.

Huda (2011: 136) states that learning procedures Think Pair Share (TPS) as follows :

- Students are placed in groups . Each group consists of four members / students.
- Teachers assign tasks to each group.
- Each member of the task is to think of yourself and send in pursuit - sedndiri first
- Group members formed in pairs . Each pair discuss the results of individual craftsmanship.
- Both couples then met again in each group to share discussions.

## 3. Research Method

### 3.1 Research Design

The method that used in this research is experimental quantitative research. In this research, the word experiment means a way of trying something new, especially in order to gain experience. Webb (2007:105), as quoted from Munadi, states, "The quantitative research is a formal, objective, systematic process in which numerical data are enjoyed to obtain information about a phenomenon."

The writer used true experimental design. According to Arikunto (2006; 117) true experimental research is a study which has two groups, one group is as experimental class and another is control class. The writer conducted the experiment to prove the hypotheses whether the treatment by using Think Pair Share would improve students' ability or not. The experimental activities involve pre-test, treatment, and post-test. This statement is supported by Prasetyo and Jannah (2005: 97), they stated that an experimental research is a study that treats or creates a condition to the subject of research. For this research, teaching treatment proceed by using Think Pair Share model. The writer described as the following table:

**Table l :** The Design of Experimental Research

| Group | Pre-Test | Treatment | Post-Test |
|---|---|---|---|
| A (Experimental) | O | XI | O |
| B (Control) | O | X2 | O |

Ket. : Xl : Using Think Pair Share
X2 : Using Conventional
O : Test

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### 3.2 Population

Population is the whole sample of the research, as it said by Usman & Akbar (2006:56), population is any of individuals that have one or more characteristic in common that is of interest to the teacher. This means that the population is the total number of subjects who are going to be observed for the need of the research. The population of this study was 60 the student of fifth year of SD Negeri 16 Banda Aceh. Class V-1 consisted of 30 students and class V-2 consisted of students.

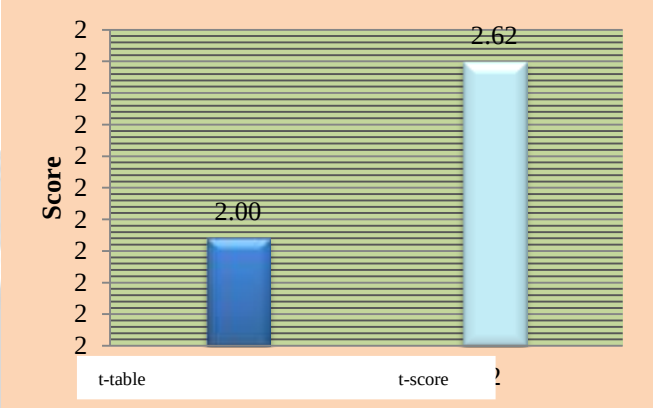
Sample is partially or representative of the population (Arikunto, 2006:130). The writer took the sample randomly. Cohen (2000: 100) explained that in simple random sampling, each member of the population under a study has the same chance of being selected and probability of a member of the population. The writer took all of the population as the subject in his study.She took the sample by using *purpossive sampling.*

### 3.3 Research Instrument

According to Arikunto (2006:53), test is a procedure or an instrument used to know or to measure something (ability, attitude, achievement and intelligence) with some particular roles. The writer used tests to measure the students' ability or improvement while conducting the research.

## 4. RESEARCH RESULT

The students' scores after giving treatment by using Think Pair Share based on Cooperative learning. The results show that the use of Think Pair Share could improve the students' ability that had been successfully conducted in the experimental class. It can be seen from the two mean scores where the mean score of the experimental class was 81.17 and the mean score of the control class was 73.90 The value of the t-table was found t=2.00 and t-score= 2.62. it can be seen as the following figure:




From the illustration above, it shows that the t-score was higher than t-table. Therefore, the alternative hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected. It indicates that there is a significant difference between the two groups. It can be concluded that the students in the experimental class who are taught by using Think Pair Share get better improvement than those in control class are taught by using conventional method.

## 5. CONCLUSIONS

The use of Think Pair Share in the teaching mathematics to the fifth year students of SD Negeri 16 Banda Aceh was more successful than that of the use of conventional. The result shows that the t-score (2.62) was higher than t-table (2.00). It indicates that the students in the experimental class who were taught by using Think Pair Share got higher scores than those in control class who were taught by using conventional method. Therefore, the use of Think Pair Share in teaching mathematics was an effective way to improve the students' ability. It is proper to mention because there was a significant difference between the experimental class and the control class when the study was conducted.

## 6. SUGGESTION

Based on result of research above, it is essential to provide suggestions in order to improve student achievement in learning Mathematics, especially the ability in learning by using Think Pair Share model. The suggestions are as follows:

**1.** A good students' achievement is very expected by all parties, both from students, teachers, principals and parents. Therefore, the students' learning process should utilize methods / techniques and approaches provided by the teacher, so that learning outcomes can be achieved based on the purpose of learning. Think Pair Share model can be used to improve students' ability.

**2.** In teaching students, teachers should implement instructional Think Pair Share model based on the procedures. So that the learning process can be run well.

**3.** In the learning process, student activities should be in accordance with the steps of Think Pair Share model. So that learning objectives can be achieved at the end of the lesson well.

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