

INTRODUCTION

1.1. Background

Education in schools is aim to improve learning outcome and learning activity especially in Physics lesson (Sudjana, 2009). Education is very important in daily life. The lack of student motivation to develop their ideas and weakness on learning during the learning process is being rapidly increased as the main problem facing on our national education now days. A good learning process is centered learning to students. Student centered learning to enabling students in teaching. Students can understand the lesson through the experience gained in learning. Otherwise few of students can master a lesson when students are only accepted from what is conveyed by the teacher. Therefore we need a method of learning that can attract students' interest in learning. The method in question is the method cooperative learning.

The quality of education in Indonesia still low and very concern. Based on data from Educational For All (EFA), development index education in Indonesia for all or education increased. If last year Indonesia have in rating 65 , this year increasing to rating 69 (Kompas, march 3th 2011)

So we can conclude the average student does not achieve the expected completeness criteria (KKM). Based on the observations made in December-January found the cause of student learning achievement low that are in the subjects of physics are physics students think it's very difficult, a lot of memorizing formulas student interaction with teachers is low.

Low of education in Indonesia show in student outcome in all lesson programs, especially in physics program. The facts shown in the results of observation in RSBI SMA N 1 Berastagi, Base on date from SMA Berastagi, have a % student graduate KKM in class X is 13 % at 2010 year, 15% at 2011 year and 12 % at 2012. Have a rotate frequency. In class XI get a 15% student at 2010, 12% at 2011, and 16 % at 2012. That data same with class X, it's have rotate frequency. And the last is in class XII have data is 14% at 2010, 14% at 2011, and the last 14% at 2012. All the

data make conclude is from every class have a little student get KKM. So the student achievement as especially in physics is still low.

Base on interview with some physics' teacher in SMA N Berastagi. The conclusion is that the model which often used by teachers with used conventional approach model and practice in the physical's laboratory. That is why the interaction of student and teacher less. The consequence, most the student passive in class. Just come, sit, silent, and go home.

The method can be used to handle low of student learning outcomes and low level of student activity are using learning model students centre. Being active student in learning, then student more meaningful because the student immediately invented to construction learning. Cooperative learning is the group learning model that has rule certain. The basic principles of cooperative learning is student making small group and mutual teaching with other to get aim together. In the cooperative learning, student can teach the other students who are less intelligent without feeling aggrieved. The students who are less intelligent can learn in the pleasant situation, because many friends can help and motivate. Student whose who previously accustomed to being passive after using cooperative learning will be forced active participation so that they can be received in their group member. (Priyanto, 2007)

Cooperative (TGT) Teams Games Tournament is organizational strategy which can be used in any subject matter area. Students are placed in four member heterogeneous teams. They receive a teacher directed lesson, help one another master the material, and compete in weekly tournaments. The tournaments are organized by "tables" of three similarly achieving students from different four member teams. In other words, high achieving students are regrouped to compete with other low achieving students; low achieving students compete with other low achieving students. The winner of a tournament table earns points for his or her original four person team. High scoring teams receive team rewards like certificates or other group recognition (De Vries, 1972).

This model has been researched by Manalu (2005). Based on the research that has been done, he concluded that the through model of teaching, outcomes of Physics learning improved where it is applied cooperative learning model TGT and average value of control class was 46,46. However, after this model was applied and obtained the result of post-test experiment class was 66, 75 and the average control class was 63, 05. From the research it can be concluded that the cooperative learning model TGT can improve student learning outcomes significantly. Therefore, researcher try to do research using some learning model, nut the differences study aims to find out or not the effect of type cooperative learning model TGT to activity of student. The reason that researcher saw teaching using conventional approach in learning.

Based on the factor, writer want to do research the title **“The effect of Cooperative Learning Model Type TGT(Teams Games Tournament) on Student Learning Achievement on Temperature and Heat Topic in Class X SMA N 1 Berastagi at Academic Year 2012/2013”**

1.2.Problem Identification

Based on background, so we get the problem identification as follows:

1. Students outcome still low (some student get standard KKM)
2. Activities student in learning process is low, so answering the teacher question only some student.
3. Direct Instruction model selection make students not active while the model make teacher learning centre

1.3.Research Scope

1. Model of learning that use a Cooperative Learning Model type (TGT) Teams Games Tournament.
2. Student activity in learning process on Direct Instruction Model and Cooperative Learning Model type TGT (Teams Games Tournament).

3. Student achievement in learning process on Direct Instruction Model and Cooperative Learning Model type TGT (Teams Games Tournament)

1.4. Research Question

Based on findings of the problem, the formulations of the problem in this research are:

1. How level of student learning activities using Cooperative Learning Model type TGT and Direct Instruction Model on Temperature and Heat topic in Class X RSBI SMA N 1 Berastagi Academic Year 2012/2013?
2. How value student learning achievement using Cooperative Learning Model type TGT and Conventional Model Direct Instruction Model on Temperature and Heat Topic in Class X RSBI SMA N 1 Berastagi Academic Year 2012/2013?
3. Are the effect of Cooperative Learning Model type TGT in student learning achievement on Temperature and Heat Topic in Class X RSBI SMA N 1 Berastagi Academic Year 2012/2013

1.5 Objective Research

The purposes of this research are:

1. To know the activities level of student as long the process of learning by using Cooperative Learning Model type TGT and Direct Instruction Model on Temperature and Heat Topic in Class X RSBI SMA N 1 Berastagi Academic Year 2012/2013
2. To know student learning Achievement by using Cooperative Learning Model type TGT and Direct Instruction Model on Temperature and Heat Topic in Class X RSBI SMA N 1 Berastagi Academic Year 2012/2013

3. To know the effect of Cooperative Learning Model type TGT in student learning achievement on Temperature and Heat Topic in Class X RSBI SMA N 1 Berastagi Academic Year 2012/2013

1.6 Significance Research

The benefits of this research are:

1. Institute and school

Provide input on School-related with the use cooperative learning model type TGT to be used as a material consideration in determining a better teaching

2. Teacher

The use of cooperative learning model type TGT expected to be useful for teacher in teaching and learning process so that it can enhance the activity, creativity and comprehension for student to form the desired learning process and achievement of good and teaching activities

3. Researcher

Add knowledge or insight in using methods cooperative learning model TGT. It can be used or training material and development in the implementation of learning process

4. Researcher further

As an input for the further researcher in the application of cooperative Learning Model Type TGT for further research in Physics education research