

CHAPTER V

CONCLUSION AND SUGGESTION

5.1 Conclusion

Based on the result of research obtained can be concluded as follow:

1. The results of students in the experimental class treated cooperative learning model of Group Investigation (GI) by the method of brainstorming on the material sound waves in the second half of the class XI SMAN 1 Tebing Tinggi is 68.61 and student learning outcomes using conventional learning models on the material sound waves in the second semester in class XI SMAN 1 Tebing Tinggi is 61.75.
2. Brainstorming patterns that develop in this method of brainstorming, students are trained to search, find, process these resources into ideas or ideas that will be used in an opinion. In addition, students are also required to be able to work independently, so that the abilities of each student can be clearly observed without criticism, students are free and relaxed, focus on quantity not quality of opinion.
3. The mechanism of the brainstorming method in improving the ability to express opinions is carried out in each meeting action. Implementation of actions in the application of brainstorming methods, namely there are three things that must be done in conducting brainstorming methods, namely preparation, implementation and review activities.
4. The quality of opinion expressed after the implementation of the brainstorming method in the process of learning physics, has increased the ability to express opinions gradually at each meeting after the application of the brainstorming method. at the first meeting the ability to express student opinions was still in a sufficient category with a percentage of 63.17%, but in the second meeting the percentage of

good categories was 74.37%, in third meeting the percentage of categories was very good at 87.33%. This is evident from the results of the observation sheet of student activities during the learning process, the activeness of students when expressing opinions, and student responses seen from the assessment of student activity, which generally shows interest or enthusiasm in the learning process using the brainstorming method.

5. Student learning activities with model of Cooperative Learning Group Investigation using brainstorming method on the material type of the sound waves in the second half of the class XI SMAN 1 Tebing Tinggi increased in the first meeting, namely 63.17, at the second meeting, namely 74.37, at the meeting III, 87, 33. and results of testing the hypothesis at significance level $\alpha = 0.005$ and $df = 70$, for testing posttest obtained $t_{\text{count}} > t_{\text{table}}$ is (2.94 > 1.998), the research shows that there is a significant effect in applying the model of Cooperative Learning type Group Investigation on learning outcomes of students on the topic sound wave of the second semester in class XI SMAN 1 Tebing Tinggi.

5.2 Suggestion

Based on the conclusion above, so as a follow-up of this study is suggested several things which are:

1. For further research, in the application of this brainstorming method still many drawback therefore, a lot of improvements to be carried out by further research that the implementation of this brainstorming method can be applied to the fullest.
2. For further research has other alternatives streamline the learning time during that stage and the syntax of the type of cooperative learning model of Group Investigation by the method of brainstorming can be done well
3. For further researchers who want to conduct the same study, is expected to give very clear instructions to students so that students are more familiar with the model used so as to create a conducive atmosphere and learning model used to operate more effectively and efficiently.