

## CHAPTER V

### CONCLUSION AND SUGGESTIONS

#### 5.1 Conclusion

After conducting research, calculating data, and testing hypotheses, the researcher draws the following conclusions:

1. The data of student learning outcomes for cognitive and affective or attitude aspect in class X MIPA 3 SMAN 5 Medan with using cooperative learning model STAD (student teams achievement division) type assisted by card test show that the average of student for aspect cognitive is 71.18 and from the value give the effect from students. And, the affective or attitude aspect of students uses a cooperative learning model STAD (student teams achievement division) type assisted by card test show that at the time of the first meeting, the average of students attitude or affective was 53.53% and for the second meeting the average of attitude students increase 68.53%. From the value we know that students have increased for aspect cognitive and aspect affective.
2. There are effect for students when student from class X MIPA 3 SMAN 5 Medan using cooperative learning model STAD (student teams achievement division) type assisted by card test. That are:
  - 1) The cognitive aspect, learning outcomes students happen increase
  - 2) The affective aspect, attitude student happen increase. With data, for listening and working worksheet student was increas but in category medium. But for asking the teacher, presenting the discussion and cooperative students was active and increase with category high.

## 5.2 Suggestions

Based on the conclusions stated above, the researcher gives the following suggestions:

1. In the teaching and learning process of physics, teachers and prospective teachers should be able to make a cooperative learning model STAD (student teams achievement division) type assisted by card test as an alternative in choosing a learning model that is expected to improve student physics learning outcomes. Because when teacher using this model, teacher can make student to be brave asking teacher, brave presenting their result of their experiment and discussion and also make student dont selfish. But when teacher using this model too, teacher must be distinct in class, because some student push your opinion about how you way to make group. In this model, teacher can see, who students can do the work with cooperate, who student can do with self, and who student can do cooperate do too by their self.
2. To the next researcher to further refine his research. This is important so that the results of this study are useful as a counterweight to the theory and as an innovation in the world of education, especially in the use of learning models in the classroom.