

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSION

Based on the research results presented in the previous section could be concluded with the application of group investigative learning models to improve students' mathematical communication ability of junior high school as follows:

1. Based on the teaching and learning process that was implemented in this research and the results of observation, mathematical learning by using the group investigation learning model can improve the students' mathematical communication ability with obtaining the percentage of 90.63% with very good categorized. Implementation of learning by using the model group investigation carried out by giving problems related to the topic of learning, and students were asked to investigate and discover their understanding of the material in groups. Teachers continue to provide encouragement and guidance to students so that students find solutions to problems with the way they own. If students learn in groups, the teacher also gave the opportunity to present the work of students, compared with the other groups, and then decide which one best answer. Then made a conclusion of the matter, in the end the students gain knowledge of the results of their construction.
2. Improvement of students' mathematical in the first cycle was very low category and the second cycle was high category index with the normalized gain was 0,51.
3. Mastery learning of students in the first cycle reached 9.36% and in the second cycle reached 87.50%
4. Learning by using group investigation learning model could make students' activity in the learning was good category.

5. Learning by using group investigation learning model could provide a positive attitude to the students in the learning process.

5.2 SUGGESTIONS

Based on these results, the authors proposed some suggestions for learning mathematics, especially in secondary schools, namely:

1. Learning mathematics with group investigative learning model could be used as one of the effective learning alternative to increasing the students' mathematical communication ability. But in the early days of learning the teacher have difficulty in preparing a child to perform cooperative learning process, student learning was difficult to accept the changes they had done so far with the constructivism learning through group learning model investigation. Therefore, it was suggested that before the process of learning to do, learning to familiarize teachers with cooperative learning so that students will get used to communicate both orally and in writing to convey ideas of mathematics.
2. To support the successful implementation of the investigative group learning models necessary teaching materials of interest, to the student activity sheet should be designed based on contextual issues close to students' daily lives and challenges students to solve.
3. In the learning process so that learning outcomes could be maximized teachers should pay attention to: (a) how to ask a question or type of question that can evoke the curiosity of students, (b) how to settle disputes over the students can have high confidence that they were not totally dependent on teacher (c) the provision of *scaffolding* on students' prior knowledge was limited to connecting students to their problem solving. (D) how to create an atmosphere of discussion among students with other students so that the discussion was not dominant mastered by students who have high ability.

4. In the investigation group learning model, the teacher acted as a facilitator. Therefore, teachers of mathematics who wish to apply this learning need to pay attention to: (a) the availability of instructional materials in the form of problems that lead to mathematical communication ability to be achieved, (b) required careful consideration for teachers in providing assistance to the student so that the student is able to achieving the expected competencies to the maximum, (c) the provision of assistance may be needed if it was to encourage the development of students' potential.
5. In addition to improve communication skills of mathematics and learning outcomes, learning models can also spur investigation group of students in a learning activity and can assist students in forming a positive perception towards learning mathematics. therefore it was advisable to learning as developed further on the topic - the topic of mathematics and different levels of education.
6. This study only reveals was the role of investigative group learning model in improving communication skills of mathematics. To complete the study of the role of investigative learning model as a whole group needs to be further research to look at the role of the investigative group learning model in improving problem-solving abilities, reasoning, and mathematical connections.