

## CHAPTER V

### CONCLUSION AND RECOMMENDATION

#### A. Conclusion

Research about effect of problem-solving model on students' concept mastery and motivation has been conducted systematically. According to the research results, it is obtained some conclusions as follows.

1. The implementation of problem-solving model in learning heat chapter can improve students' conceptual mastery. It is noticed and proven by the results of average N-Gain of both boys and girls' class. Average N-Gain result obtained by girl's class is 0.83 which is categorized as high, while boy's class got 0.62 for average N-Gain result which can be categorized as medium. The result indicates that the concept of heat can be understood better by the students after having instruction using problem-solving model. The improvement of students' conceptual mastery is also supported by the acceptance of  $H_1$  which means that there is a significant effect of problem-solving model towards students' conceptual mastery.
2. The implementation of problem-solving model in learning heat chapter can improve students' motivation. It is noticed and proven by processing data of boy students' response percentage. The percentage of girl students' motivation class is higher than the percentage of boy students' motivation. The response of students' motivation towards the implementation of problem-solving model in learning heat chapter shows positive response in two indicators; leisure and usefulness. The highest score is obtained by the indicator of usefulness which means that the students agree that problem-solving learning is stimulating students' curiosity.

## **B. Recommendation**

1. Problem-solving model can be implemented as an alternative teaching media and strategy to improve student's conceptual mastery and motivation on another concept that requires the students to memorize the concept and require hands-on activity.
2. The time allocation for demonstrating the experiment activity should be consider more than one hour-lesson to have better preparation.
3. For another gender-based research, it is better to have an observation in order to know the characteristic of both girl and boy classes before implementation stage in order to efficient the time and energy of teacher/researcher. Knowing the characteristic of the class will make the teacher master the class.
4. For another students' motivation research, it is better to have additional way to assess students' motivation, such as, by observation apart from questionnaire. So that the data analyzing process could be more comprehensive.
5. For the better outcomes, it is suggested to another researcher for stimulating students' curiosity more by throwing questions to recall the students' prior knowledge about material related.
6. For other researcher who have interest in trying problem-solving model, it is recommended to have more session and meeting to use this learning model. More time given to involve in this learning model, the more students understand the idea of the material which can affect students' critical thinking and analyzing thinking.