

## CHAPTER V

### CONCLUSION AND RECOMMENDATION

#### A. Conclusions

The research is about the effect of integrated science text book towards students' conceptual understanding and students' motivation in learning global warming. The results of this research is to compare the experimental class and control class who using different text book. Experimental class using integrated science text book while control class using cellular science text book (only physic). According to the results and discussions, there are some conclusions. The conclusions of this research as follows:

1. The Students' conceptual understanding is increase using integrated science text book. This results based on the results of posttest which are significantly increase from both class. The N-Gain for control class has reach 0.45 while experimental class has reach 0.54. Both class have medium increase from pretest score to the posttest score. The results of posttest average from experimental class is 67.98 while control class is 57.98. The higher significantly increase for students' conceptual understanding is experimental class that used integrated science text book.
2. The results of questionnaire show that the students' motivation are increase from both class when they learn global warming. The students' motivation from experimental class has reach 4.3 from 5 while control class has reach 3.9 from 5. Both class have good motivation in learning global warming. The higher significantly increase is experimental group that used integrated science text book.

## B. Recommendation

According to the activity during the research, the problem comes during the research, unexpected condition during the research and the results of the research, the researcher give the recommendation for the next research. The recommendation is as follow:

1. When creating the integrated science text book, the choose of expert judgements must be clear following the expert criteria such as the background of his/her education, the objective minding (not subjective minding), the tendencies of the topic and the minimum expert judgement should be 3 because integrated science include biology, chemistry and physics. Expert judgements should fulfil the sub disciplines for each in order to make the text book are good quality.
2. Choosing the population and sample must be in line with the lessons plan. In this research, there are missing step for implementing the integrated science text book. In this research is not implementing the pHet simulation regarding greenhouse effect because the facility of the school is not support.
3. Integrated model can be applied into other topic not only for global warming. Integrated model can be used for creating another topic especially on science with no reduction on the third disciplines (it should be biology, chemistry and physic are in one unity).
4. Time management and the focus of learning must be attention in learning process because integrated model contains at least 3 different disciplines.
5. It will be better if the researcher analyzes the students' profile on learning style in order to increase their achievements based on their learning style.
6. Based on the finding of the study, the correlation between students' conceptual understanding and motivation are not really correlate. Several students get high results in posttest and motivation but another student get high results in posttest but low results on motivation. please consider another aspect such as the difference of learning style and habituation of learning for all students.