CHAPTER 5
CONCLUSION AND RECOMMENDATION

A. Conclusion

This research gives information about how the PDEODE (Predict-Discuss-Explain-Observe-Discuss-Explain) method can be effectively implemented to help students generate conceptual change and give information about students’ acquisition of science process skills. In this research, students were asked to predict the outcome of phenomenon about separation of mixture topic through conducting hands on activity that consist of magnetic attraction experiment (separating staples from sand), decantation experiment (separating oil from water), filtration and evaporation experiment (separating salt from sand).

PDEODE method gives effects on students’ conceptual change on the degree to which students generate conceptual change on separation of mixture concept. The implementations of PDEODE method help students change their negative conception into positive conception about separation of mixture concept, through the implementation of PDEODE method, there are two kinds of conceptual change patterns found on magnetic attraction concept, three kinds of conceptual change patterns found on decantation concept and two kinds of conceptual change patterns found on filtration and evaporation concept.

PDEODE method influences the acquisition of science process skills on separation of mixture concept through hands on experiment. There are nine kinds of skills that were acquired by students, it consist of observing, classifying, inferring, predicting, questioning, formulating hypotheses, conducting investigation and collecting data, applying concept and communicating. The percentage of students’ acquisition of predicting skill, classifying skill, observing skill, conducting investigation skill, inferring skill and communicating skill obtained the percentage above the average, meanwhile the acquisition of formulating hypotheses skill and questioning skill are...
below the average, with the highest acquisition is in conducting investigation skill, followed by communicating skill, observing skill, predicting skill, inferring skill, applying concept skill, classifying skill, formulating hypotheses skill and the lowest percentage is questioning skill.

B. Recommendation

Regarding of the research that has been conducted, researcher arrange recommendation as follow:

1. For the teacher and teaching practice students, PDEODE method can be implemented as one of alternative in separation of mixture instructional activity and another science instructional activity. This method can be conducted to facilitate conceptual change and acquisition of science process skills of students.

2. For another researcher, PDEODE method has been implemented on scientific concept in chemistry, physics and biology. In chemistry concept, this strategy can be implemented to facilitate conceptual change in condensation concept, physical and chemical changes concept or chemical reaction concept.

3. For further research, use Science Process Skills (SPS) test items and intersubjectivity to enrich observation sheet.