## **BAB V**

## CONCLUSION AND RECOMMENDATION

## 5.1 Conclusion

Based on the results of the study and data analysis, some conclusions were drawn as followed:

- 1. The learning styles results mapping (using Embedded Figure Test) in the three different classes at SMP Negeri 1 Labuhandeli especially for grade seven, the analyses of the EFT (Embedded Figure Test) scores indicate that student tend to have different cognitive styles. Most of grade 7<sup>th</sup> students at SMP Negeri 1 Labuhandeli were categorized as field dependent. It is suitable with Vigotsky's metal development where junior high school students were presence in the 11-14 years old (about first grade to early adolescence).
- 2. There was significantly effects of learning models (Project Based, Group Investigation and Conventional Learning models) toward students' science process skills of SMP Negeri 1 Labuhandeli Project Based Learning model was better than Group Investigation learning model better than conventional learning model to increase the science process skills of students.
- 3. There was significantly effect of cognitive styles (Field Dependent and Field Independent toward science process skill. The Field Independent learners show the best performance in the PjBL class. The score gained of Field Independent students were higher than Field Dependent. This suitable with the characteristics of each cognitive styles, where FI more analytic, extrinsic motivatited than FD students.
- 4. There was an interaction between learning models and cognitive styles toward science process skills.
- 5. There was also an effect of learning models (Project Based, Group Investigation and Conventional Learning models) toward self directed learning of SMP Negeri 1 Labuhandeli who have field dependent (FD) and Field Independent (FI). For this dependent variable, the mean scores of FD and FI students which taught using PjBL and Group investigation was not

- significantly different, but if it compare with conventional, both PjBL and Group Investigation show the significance different.
- 6. There was also an effect of cognitive styles toward students' self directed learning of SMP Negeri 1 Labuhandeli who have field dependent (FD) and Field Independent (FI).
- 7. There was an interaction between learning models and cognitive styles toward students' self directed learning.



## 5.2 Recommendation

This recommendation was basically the follow up steps based on the research findings and conclusions, so some suggestions can be considered for educational improvement. Namely:

- 1. It was important for the educator know their students' learning style, because every student has a uniqueness and learning preferances in the processing information. In this case, the improvement of the learning style mapping also need for better ressult. Conducting learning mapping in the initial stage of new students' revenue may become a good consideration for school. Furthermore, understanding students learning styles not only useful for pupils but also helping teacher in arranging learning strategies for overcoming student's diversity of learning styles. By understanding several kinds of learning styles, it will give students information about their own style in learning. So that, they able to develop their self not only in one learning style but also in several styles in learning to get good mark in learning process, improve their science process skills and self-directed learning.
- 2. The teacher should be able to arrange blanded learning strategy. Because, teaching using single method or learning model is not enough to encourage student's ability. Project based and group investigation learning model can be as suggestion to handle the diversity of students' learning characteristics.

