

## CHAPTER V

### CONCLUSION AND RECOMMENDATION

#### A. Conclusion

Research of Project-Based Learning implementation has been conducted systematically, based on the research result it is acquired some conclusions as follows:

1. The implementation of project-based learning model on People and The Planet chapter can improve students' cognitive achievement, it can be noticed by processing the differences between pretest and post-test score which is gained by students that shows an improvement and obtain normalized gain as much as 0.46 which include as medium category.
2. Project-based learning model is capable to improve students' problem solving skill if it is implemented on People and The Planet chapter, it stated so because of the result from students' score in pretest and post-test that encounter an improvement. The improvement is indicated by the normalized gain ( $\langle g \rangle$ ) as much as 0.38 which categorized as medium improvement.
3. The leveling of problem solving skill in this research apparently encounters a shifting result. The shifted result shows when the pretest was given to students, the dominant acquisition is level 1 problem solver as much as 75% the rest are level 2 problem solver. Meanwhile, when the post-test was given to the students the dominant level is in level 2 problem solver as much as 62.5% some of the rest are still in level 1 problem solver, the other one have already reach the 3<sup>rd</sup> level of problem solving skill, and only a student that can reach the 4<sup>th</sup> level of problem solving skill.
4. A poster was determined as final product of the project-based learning implementation. The result of the poster shows positive accomplishment, the product in term of visual organization shows higher value rather than the product of knowledge.

5. The respond of students towards project based learning implementation shows positive respond in all indicators; teamwork ability, cognitive achievement trough PjBL, problem solving skill, and respond to poster as final product. The highest score is obtained by poster as final product it means that most of students agree that poster is really appropriate to be created as final product of the project.

## **B. Recommendation**

Based on the findings of the research that has been conducted and concluded, there are several recommendations that necessary to be conveyed by the researchers, some of them are:

1. Project-based learning model can be implemented as an alternative teaching strategy in other science concept at schools.
2. Before designing a project for learning, teacher ought to adapt the learning with characteristics of participant student, school curriculum, subject matter appropriateness, learning objectives, school environment, and facilities, so that the project plan can run smoothly and not burden the students.
3. Realizing that creating a project requires sufficient time, teacher must be thorough in determining time allocation. Whether time for preparing the project design for teacher as well as finishing the project given for students, so that all students can finish the project optimally.
4. At teacher consultation input/feedback stage, it is necessary to insert some concept of the subject to avoid misunderstanding. Teacher also needs to make sure that all students are participating and work together in group to finish the project.

5. At syntax of final project shared with larger group, teacher also have to make sure that all students understand about the concept given by other group by checking their knowledge at least orally, teacher also need to guide students in the whole learning.
6. To other researcher who also have the same interest about project-based learning implementation, it is most recommended to develop the research wider in term of research variable, subject matter, and the lesson plan.

