### **CHAPTER V**

#### CONCLUSION AND SUGGESTION

#### 5.1 Conclusion

Based on the formulation, objectives, results and discussion of development research of learning material for the ecology and environmental management topic based on integrated curriculum and scientific literacy for IGCSE 2 / X grade students that stated earlier, it can be concluded that:

- The feasibility of learning material on ecology and environment topics based on scientific literacy and integration curriculum which developed based on *science as body of knowledge* from content expert is very feasible (excellent).
- 2) The feasibility of learning material on ecology and environment topics based on scientific literacy and integration curriculum which developed based on science as a way of thinking from content expert is very feasible (excellent).
- 3) The feasibility of learning material on ecology and environment topics based on scientific literacy and integration curriculum which developed based on *science as a way of investigating* from content expert is very feasible (excellent).
- 4) The feasibility of learning material on ecology and environment topics based on scientific literacy and integration curriculum which developed based on *interaction of science, technology and society* from content expert is very feasible (excellent).
- 5) The feasibility of learning material on ecology and environment topics based on scientific literacy and integration curriculum which developed based on design expert is very feasible (excellent).
- 6) The feasibility of learning material on ecology and environment topics based on scientific literacy and integration curriculum which developed based on assessment of biology teachers is very feasible (excellent) and students' response is also very feasible (excellent).

7) There is a significant difference of using learning material for the ecology and environmental management topic based on integrated curriculum and scientific literacy to students' learning outcomes of IGCSE 2 / grade X students. Student learning outcomes that use teaching materials are significantly higher than students who use the usual teaching materials.

## 5.2 Suggestion

Based on the findings described at the conclusion of the research results, the following are some suggestions, namely:

- 1) The feasibility of learning material on ecology and environment topics based on scientific literacy and integration curriculum which developed based on science as body of knowledge, science as a way of thinking, science as a way of investigating, and interaction of science, technology and society from content expert must be tested by more material experts to get more reliable results.
- 2) The feasibility of learning material on ecology and environment topics based on scientific literacy and integration curriculum which developed based on design expert must be tested by more design experts to get more reliable results.
- 3) The feasibility of learning material on ecology and environment topics based on scientific literacy and integration curriculum which developed based on assessment of biology teachers must be tested by more biology teachers to get more reliable results.
- 4) The feasibility of learning material on ecology and environment topics based on scientific literacy and integration curriculum which developed based on students' response must be tested by more students to get more reliable results.
- 5) Because so far the learning process in SPK schools still used separate teaching materials, it is recommended that using more applicable teaching materials, which can help students understand integrated curriculum learning materials so as to provide better feedback for students. The results

in this study are still possible influenced by factors that have not been able to be controlled, then further research needs to be done on more and broader samples.

# 5.3 Implication

Implications are the direct effects that occur because of something such as discovery or because of research results. This development research shows that the developed learning material on ecology and environment topics based on scientific literacy and integration curriculum for grade x / IGCSE 2 students is a good learning material. The assessment of several experts such as material experts, instructional design experts and graphic design experts is very helpful to view the shortcomings and help researchers to improve the quality of teaching materials developed to suit the needs of students in studying ecology and environmental management. Likewise with the responses of biology teachers and students, it greatly contributes to researchers to design a teaching material that suits their needs.

The implementation of an integrated curriculum is more efficiently implemented with the use of teaching materials in the learning process. With this teaching material, the implementation of the integration curriculum is not too complicated and can answer demands in both curriculums. Students feel the direct benefits of using teaching materials in the learning process. Henceforth, this teaching material can be patented and completely printed for public use of National Plus Schools in Indonesia.

