CHAPTER V
CONCLUSIONS AND SUGGESTION

5.1 Conclusion

The conclusions from the results of research and development of TPACK-based E-Books are as follows:

1. TPACK-based e-books were declared 90.11% suitable for use as textbooks in schools based on validation results from learning media experts, learning material experts, learning design experts, language experts and students. Learning material experts stated that the TPACK-based E-Book was very good and very suitable for use with a score of 51 out of 52 ($\bar{x}$ = 98.07).

2. Media experts state that this TPACK-based E-Book is suitable for use or valid. TPACK-based e-books were declared feasible by assessing all aspects according to media experts, and obtained an assessment with a score of 39 out of 52 ($\bar{x}$ = 75).

3. Learning design experts stated that the TPACK-based E-Book was very good and very suitable for use with a score of 77 out of 80 ($\bar{x}$ = 96.25). Learning design experts state that this TPACK-based E-Book is suitable for use or valid.

4. Linguists who stated that TPACK-based E-Books were good and feasible with a score of 34 out of 40 ($\bar{x}$ = 85). Linguist experts state that this TPACK-based E-Book is suitable for use or valid.

5. Teacher assessment states that the TPACK-based E-Book is very practical with a total score of 24 out of 24 ($\bar{x}$ = 100). TPACK-based e-Books are stated to be practical because they are easy to understand, instructions for use, operational techniques and operating practices in a variety of environments.

6. Student assessment states that TPACK-based E-Books are practical to use during learning. This is because 32 students stated that TPACK-based E-Books were practical to use in the learning process with a practicality level of 353 out of 384 ($\bar{x}$ = 91.92), and were in the very good category. The results of student eligibility at the one-to-one evaluation stage were very good with a score of 189 out of 192 ($\bar{x}$ = 98.4), at the small group stage it was very good with a score of 748 out of 840 ($\bar{x}$ = 89.04), and the field test was very good with a score of 1,282 out of 1,440 ($\bar{x}$ = 89.02).

7. Textbooks in the form of E-Books are said to be 90.58% effective in improving students' scientific literacy skills based on teacher assessments and student post-test results. The students' post-test results at the implementation stage obtained an average of ($\bar{x}$ = 72.9) with 84.37% in the effective category. The N-Gain value obtained by students in this study was in the high category, namely 0.71 (high category).

5.2 Suggestion

Several recommendations emerge for further research and development based on the findings of this study:

1. Students should prioritize engaging with TPACK-based E-Books to enhance their scientific literacy in science education. It is crucial for students to consistently read and comprehend the content of these E-Books to bolster their grasp of scientific concepts.

2. Teachers can leverage TPACK-based E-Books as integral resources during science lessons to foster scientific literacy among students. Moreover, educators are encouraged to employ creativity in crafting teaching materials that effectively enhance scientific understanding.

3. Schools are advised to adopt TPACK-based E-Books into their curriculum to support the learning process. Additionally, schools can facilitate teachers in their efforts to innovate and develop science textbooks that cater to diverse learning needs.

4. Future researchers are encouraged to explore the potential of TPACK-based E-Books in increasing scientific literacy in various science subjects. This line of research can make a significant contribution to improving students' understanding of science concepts, especially among junior high school students. However, for sampling methods it is better not to use random sampling techniques, because it is difficult to access population lists and accurate statistical measurement results can only be obtained from simple random sampling from existing lists.