

CHAPTER V

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

After conducting this study, the conclusion that can be reached is as follow:

1. Mobile learning application can be made by developing it in several steps: content analysis, material source analysis, user analysis, software necessity analysis, hardware necessity analysis, design stage of mobile learning application making which consists of learning materials, flowchart, and storyboard. Then, the development stage which consists of interface construction and coding to make the mobile learning application. After that, it is evaluated by experts in three main aspects which are content, language, and media. The revisions are taken from experts' suggestions, therefore the mobile learning application is evaluated by science teachers and Junior High School students.
2. Based on the content experts' evaluation the average score of this mobile learning is 83.33%, the language evaluation based on experts is 79.157%, and the media design (IT) is scored 83.33% in average out of 100% range. The overall evaluation score indicates that this mobile learning application is very good.
3. Based on the science teachers' review, the mobile learning application percentage is 80.545% out of 100% which is very good. The impression of Junior High School students toward this mobile learning application based on questionnaire analysis is a gain score of 87.87% out of 100% which means very good.

5.2 Recommendation

There are some recommendations for a future study regarding to mobile learning application based on Arduino project development and its implementation to science teachers and Junior High School students as follow:

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1. The materials not limited only in dynamic electricity but for further research, more topics on science subject can be enriched. The addition of some animation in the learning content rather than only text should be considered to make students comprehend the materials in a way that is more fun.
2. The flow of materials presented should also be considered to make the user experience the whole learning with the links provided in each subtopics for the additional explanation.
3. The feedback for each quiz, so the students can know which question they answer wrong and right, not only show their final score. The clear objective for each material, projects, and quizzes should be explained also.
4. The language used for the whole application should be correct whether it is the grammar, diction, pronunciation, and accent.
5. The specification of 21st Century skill that students will be get after learning the electricity topic through Arduino UNO projects in the form of Android mobile learning application should be declared and investigated more. The future research of mobile learning that can enhance the 21st Century skill of students in specific aspect and the comparison of mobile learning with real experiment are recommended.

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