

CHAPTER V

CONCLUSION, IMPLICATIONS, AND RECOMMENDATIONS

5.1 Conclusion

The implementation of discovery learning as the teaching method assisted by Legends of Learning as the teaching media executed in four different meetings, over two-week period including the pretest and posttest. The participants are 50 students from 8th grade who filled both pretest and posttest. All of the discovery learning steps were successfully occurred except few meetings from each class was asynchronous.

Based on the analysis of the whole research, it can be concluded that the implementation of discovery learning supported by web-educational games from Legends of Learning has different result of enhancement to student concept mastery and student curiosity. The improvement of student concept mastery showed the acceptance of H1 indicates that there is significant different of the implementation of the treatment to the student concept mastery. The enhancement is categorized as medium. The highest cognitive domain that achieved is on medium level from C2 (Understand), and the lowest is C3 (Apply) cognitive domain with low efficiency result. Discovery learning assisted by LoL games also enhance students' performance on each subtopics, the highest score was Light Properties subtopic and categorized as medium, the lowest is the fourth subtopic, which is Speed of Light.

In contrast, the implementation of discovery learning assisted by games from LoL has not yet showing improvement for student curiosity level since the N-Gain result shown a negative score both in total and from each aspects. On the other hand, Science aspect has the lowest N-Gain rank rather than the other aspects and Stretch is the highest N-Gain score. However, there are 17 students with positive N-Gain score. Unfortunately, those score were all categorized low too.

5.2 Implications

Associated to the results and discussions, here are the implications of the research:

- a. Student concept mastery implies positive improvement because the involvement of LoL games during the discovery learning implementation make students excited to learn and actively discussed it with other students. The explanation in the games also help students to master the concepts of the learning objectives.
- b. The result of curiosity shows not a really good improvement because the students tend to confuse to the statements that supposed to assess their curiosity enhancement and lack of direct supervising might also be the reason of the low enhancement.

5.3 Recommendations

From the analysis result of the research, there are several recommendations for further research. First, the researcher recommend the treatment of combination between discovery learning and LoL games to be implemented in the classroom since it showed an enhancement in students concept mastery. Adding to that, it is also help the students to understand complex material because the implementation could help master the concept easier.

Nevertheless, there are several recommendation for future researcher. If the data for the research taken from online learning process, make sure the instructions has to be as clear as possible to prevent misunderstandings from the students regarding the filling in the pretest and posttest. It would be more effective if the implementation done in every subtopics so the discovery learning would affect more on each variable that targeted to be improved. In term of selecting that target samples, it is better to involve participants from the same environment or class to prevent bias from the research.

The researcher suggest to always stick to the plan of timetable so things won't messed up, and reassure to always have backup plans. In future research, the researcher also suggest to try another topic to implement to the students because LoL websites has a lot of games that students can explore.