

CHAPTER V

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

Based on the research problem and finding on the use of digital interactive mind map to enhance students' concept mastery and creativity in learning excretory system that has been conducted in SMP Ar-Rafi Drajat, it can be proved that learning on excretory system topic by using digital interactive mind map can improved students concept mastery and it has an effective used for measuring students' creativity. Further, learning with digital interactive mind map leaves good impression for students. There are some conclusions that answered the research questions described as follows:

- 1) The students' learning process after learning excretory system by using digital interactive mind map showed a good result. Based on observation, even though all of the main activities in the learning process were implemented via online the implementation is in line with the planning. The main activities including tutorial on using digital mind map, making individual mind map, and material review by the teacher. It means that students very well participated in learning and teaching activities.
- 2) The students' concept mastery after learning excretory system using digital interactive mind map was considered good because after conducting the treatment, the average score shows significant improvement. It can be seen from the comparison of post-test and pre-test score. The average score of pre-test is 49.6 and after the treatment, the average score resulting on post-test is 90. The N-gain for all cognitive level shows above 0.80 which categorized as high.
- 3) The students' creativity after learning excretory system using digital mind map showed the fair results. Overall, elaboration area has the average score of 4.78 out of 6. Meanwhile, flexibility area has the average score of 4.72 out of 6. The fluency indicator shows the average score of 9.72 out of 12 while originality indicator shows the average score of 6.94 out of 9. The whole average of score from four indicators shows the positive effect.

- 4) Digital interactive mind map in learning excretory system resulting good impression from the students. It is because digital interactive mind map made learning interactive and students got opportunity to think creativity by making it. The students also state that digital interactive mind map really help them to understand more about excretory system topic and they really enjoy learning using digital interactive mind map because it gave them positive experience.

5.2 Recommendation

Based on the findings of the conducted research that has been concluded, there are some recommendations for other researchers and teachers who can develop and improve the educational field as follows:

1) Another researcher

The achievement of students' concept mastery and students' creativity that are measured through an objective test expected as a basic information to the further research due to the innovation in improving the same variable. Moreover, this study can be used as a reference for other relevant research. It is suggested to use broader sample for conducting the research, in finding more trusted results. The validation of the test items and students' communication rubric should also be more considered.

1) Teacher

The analysis about the implementation of digital mind map in learning excretory system can be a reference and basic information for teacher to conducting teaching learning process to assess students' concept mastery and creativity abilities. Teacher should make sure that the facilities that will be used are available at school, such as computer, Wi-Fi, and mind map software. Explaining the rules and procedures for brainstorming in mind map making must be clearly explained.