

CHAPTER V

CONCLUSIONS AND SUGGESTIONS

5.1. CONCLUSION

The conclusions obtained in this study are:

1. The strategy that has been carried out to develop project-based innovative teaching materials for teaching chromatography is in the form of innovative teaching materials in the form of e-books with topics developed based on KKNi curriculum consisted of the background of chromatographic techniques, understanding of chromatography, types of chromatography, chromatographic terminology and dynamics of chromatography.
2. The project that can be developed to be integrated into Chromatography teaching materials so that Analytical Chemistry learning is easy to learn consists of 3 projects with 2 titles, namely the separation of the color by paper chromatography and simple separation of dyes in samples on paper chromatography along with the competencies expected to be achieved by students after doing the project.
3. The strategy that will be carried out to standardize innovative teaching materials in order to achieve the eligibility criteria for teaching materials according to BSNP standards is through questionnaire validation in the form of a questionnaire with the average result obtained is 3.61 obtained from the content eligibility component. , language, presentation and graphics are 3.57, 3.62, 3.55, and 3.70 respectively. Based on the results of student responses to the developed teaching materials are also very positive so it can be concluded that the innovative teaching materials that have been developed are categorized as good and eligible to use.
4. The teaching and learning activities of students when using innovative project-based teaching materials for teaching chromatography are categorized as very active, as can be seen from the average result of the student activity assessment questionnaire, which is 3.87 with a percentage rate of 96.85%.

5. Learning outcomes of students who are taught using innovative project-based teaching materials in teaching Chromatography have improved in the form of an increase in learning outcomes by 62.5 points after being taught with innovative teaching materials with project based learning.

5.2. SUGGESTION

Based on the results of the research, discussion and conclusions above, the researchers suggest that:

1. For teachers in teaching chromatography material, especially in project-based learning, they should use teaching materials that are effective and support all aspects of learning topics so that students can easily understand the material in its entirety, both in concept, practice and also its application in everyday life. Researchers suggest using innovative project-based teaching materials that have been developed in this study.
2. For further researchers, it is better to develop project-based teaching materials on other materials so that they can improve higher-order thinking skills in other materials.