

CHAPTER V

CLOSING

5.1. Conclusion

Based on the findings of research conducted at SMAN 2 Percut Sei Tuan on learning outcomes and student activities in class XI acid-base learning during the 2023/2024 academic year, the following conclusions can be concluded:

1. There is a significant influence of the use of the Project-Based Learning learning model on learning outcomes in class XI acids and bases material at SMAN 2 Percut Sei Tuan for the 2023/2024 academic year. The results of the independent t-test on post-test data yielded a t_{count} of 23.777 and a Sig (2-tailed) of 0.000. The t_{table} distribution value for $df = 70$ and a significance level of $\alpha = 0.05$ is 1.994. Because $t_{\text{count}} > t_{\text{table}}$ ($23.777 > 1.994$) and Sig. (2-tailed) $0.000 < 0.05$, H_0 is rejected, and H_a is approved.
2. There is a significant influence of the use of the Project-Based Learning learning model on student activities in class XI acids and bases material at SMAN 2 Percut Sei Tuan for the 2023/2024 academic year. The findings of the independent t-test on the final activity data were $t = 6.167$ and Sig (2-tailed) = 0.000. The t_{table} distribution value for $df = 70$ and a significance level of $\alpha = 0.05$ is 1.994. The value of $t_{\text{count}} > t_{\text{table}}$ ($6.167 > 1.994$) and Sig (2-tailed) $0.000 < 0.05$ rejects H_0 and accepts H_a .
3. There is a correlation between increased student learning outcomes and student learning activities. This is evident in the findings of the correlation test between learning outcomes and student activities utilizing the project-based learning approach. There is a significant association between student learning outcomes and learning activities at SMA Negeri 2 Percut Sei Tuan on acid-base material, as indicated by Sig. (2-tailed) = $0.000 < 0.005$.

5.2. Suggestion

Based on the research process and results, the researcher provides suggestions:

1. the researcher in presenting concepts and identifying data, the majority of students were able to understand acids and bases and increased student activity after implementing the Project-Based Learning model. Hence, the researcher suggested that teachers could use the Project Based Learning model as an alternative learning model for students in class XI.
2. Teachers should always encourage students to study the material first before starting learning so that students can be active when learning takes place.
3. It is hoped that there will be further research on learning using the Project-Based Learning method so that it can help teaching staff improve the quality of education.