

CHAPTER V CONCLUSIONS AND SUGGESTIONS

5.1 Conclusions

The following conclusions can be drawn from the research and discussions presented:

1. Hypothesis test on students critical thinking skills has $t_{count} > t_{table}$ ($4,9307 > 1,671$). A $t > t_{(1-\alpha)}$ indicates that H_0 is rejected and H_1 is accepted. N-gain test value $g > 0.7$, namely 0.74 with a high category in experimental class. There is an effect of the application guided inquiry learning model based on PhET media on improving students critical thinking skills on vibration and wave material.
2. The critical thinking skills of students taught with the guided inquiry learning model based on PhET media mean showed is 82.31%. There are 2 critical thinking indicators with a percentage above 90% in the experimental class, namely Evaluation and Explanation.

5.2 Suggestions

Based on the research results and discussion, the following suggestions can be given:

1. For further researchers, it is better to focus on Interpretation and Analysis indicators by providing questions that help students understand the meaning of information and evaluate it logically to develop a deeper understanding. The it is better to teach material in detail to optimize research time.
2. For further research, the use of PhET simulations is not only operated by researchers, but also involves students directly by utilizing school facilities or personal mobile devices so that student involvement and understanding can be more optimal.
3. For science teachers, it is better to use a guided inquiry model to improve students' critical thinking skills by focusing on critical thinking skills indicators.