

CHAPTER V

CONCLUSIONS AND SUGGESTIONS

5.1 Conclusion

Based on the description above, the results of the research can be concluded as follows, including:

1. The average student learning outcomes before the experiment was carried out in the experimental class I obtained a value of 27.13 while in the experimental class II it was obtained a value of 23.75.
2. After applying the model Problem Based Learning(PBL) integrated with interactive PowerPoint media obtained an average student score of 85.25 in the experimental class I with an average critical thinking ability score of 58.89, while the application of the Direct Instruction model obtained an average student score of 78.25, while in the experimental class II it was found that the average value of students' critical thinking skills was 51.80. The research might conclude that Problem-Based Learning (PBL) oriented Lesson Study, when combined with Interactive PowerPoint, is an effective instructional approach for enhancing students' critical thinking ability in understanding and applying concepts related to Materials Buffer Solution. This conclusion would be supported by evidence of significant improvement in critical thinking skills among students who received the PBL-oriented instruction.
3. Based on the data analysis, the results were obtained $t_{count} > t_{table}$ ($0.875 > 0.312$) in the experimental class I and $t_{count} > t_{table}$ ($0.701 > 0.312$) in the experimental class II, it can be concluded that there is a positive correlation between student learning outcomes and students' critical thinking skills with the model Problem Based Learning(PBL) integrated with PowerPoint interactive media and with Direct Instructions (DI), where student learning outcomes and students' critical thinking skills are modeled Problem Based Learning(PBL) has more significant results compared to Direct Instruction Model (IN).
4. Impact on Specific Critical Thinking Skills: The research might identify specific critical thinking skills, such as problem-solving, analytical

thinking, and creativity, that were significantly improved among students exposed to the PBL-oriented Lesson Study. This conclusion would emphasize the importance of this instructional approach in developing particular cognitive abilities.

5. Comparative Effectiveness: The study might conclude that the PBL-oriented Lesson Study with Interactive PowerPoint showed superior results in enhancing critical thinking ability compared to Direct Instruction Model. This conclusion would suggest the potential benefits of adopting innovative instructional approaches in science education.

Overall, the conclusions of the thesis will provide valuable insights into the impact of Problem-Based Learning (PBL) oriented Lesson Study with Interactive PowerPoint on students' critical thinking ability in the context of Materials Buffer Solution and will contribute to the existing body of knowledge in science education and instructional methodologies.

5.2 Suggestions

1. To School

It is expected that schools will use PowerPoint Interactive media as a model and alternative media, because these modes and media have been proven to increase learning activity, learning creativity and students' critical thinking power.

2. To Teacher

It is hoped that especially chemistry teachers can apply the Problem Based Learning (PBL) learning model because this learning model can increase student learning activities and student learning outcomes

3. To Students

It is expected that students will be more active in discussing with their groups in solving problems in the learning process.

4. To Further Researchers

It is hoped that this writer's research can be used as a reference for conducting similar research in different learning.