

ABSTRACT

SABHA NURUL HAROMAIN. 2024. **THE EFFECT OF PROBLEM BASED LEARNING MODEL ASSISTED BY VEE DIAGRAM ON PROBLEM SOLVING ABILITIES AND COMMUNICATION SKILLS OF STUDENTS ON ENVIRONMENTAL CHANGE MATERIALS (Experimental Study in Class X SMA Negeri 7 Tasikmalaya Academic Year 2023/2024)**. Department of Biology Education, Faculty of Teacher Training and Education, Siliwangi University, Tasikmalaya.

This study aims to determine the effect of Problem Based Learning model assisted by vee diagram on problem solving ability and communication skills of class X students of SMA Negeri 7 Tasikmalaya in the academic year 2023/2024 on environmental change material. The research method used is a quasi-experiment with Posttest Only Control Group Design. The population in this study were all class X consisting of 12 classes with a total of 441 students. Sampling using purposive sampling technique, namely class X-E8 as the experimental class, class X-E12 as the positive control class, and class X-E6 as the negative control class. The instrument used was a test in the form of a description question as many as 8 questions of problem-solving ability and a communication skills questionnaire as many as 16 statements. The research data were processed by prerequisite test analysis in the form of normality test and homogeneity test, while for hypothesis testing using One Way ANOVA test. The results of the problem-solving ability research showed a Sig. $0.001 < 0.05$ and communication skills showed Sig. $0.042 < 0.05$ so that there is an effect of Problem Based Learning model assisted by vee diagram on problem solving ability and communication skills of students. The Least Significant Difference (LSD) test results show that the Problem Based Learning model assisted by vee diagrams affects the problem-solving ability and communication skills of students compared to the Problem Based Learning model and the Discovery Learning model.

Keywords: *Problem Based Learning, Vee Diagram, Problem Solving Ability, Communication Skills, Environmental Change*