

THE EFFECT OF PROBLEM BASED LEARNING MODEL USING WORDPRESS WEB ON CRITICAL THINKING SKILLS AND SCIENCE COGNITIVE LEARNING OUTCOMES

(Experimental Study in Class VIII MTs Negeri 2 Kota Tasikmalaya on Wave Material).

ABSTRACT

Wuri Yulia Wulandari. 2025. THE EFFECT OF PROBLEM BASED LEARNING MODEL USING WORDPRESS WEB ON CRITICAL THINKING SKILLS AND SCIENCE COGNITIVE LEARNING OUTCOMES. (Experimental Study in Class VIII MTs Negeri 2 Kota Tasikmalaya on Wave Material).

This study aims to determine the effect of the Problem-Based Learning (PBL) model assisted by the WordPress web on students' critical thinking skills and cognitive learning outcomes in the topic of waves. The research was motivated by the low cognitive learning outcomes and critical thinking skills of students in science learning. The research was conducted from September 2024 to May 2025. The method used was a quasi-experimental design with a one-group pretest-posttest design. The population consisted of all eighth-grade students at MTs Negeri 2 Kota Tasikmalaya, totaling 10 classes with 298 students. The sample consisted of two classes selected using cluster random sampling. The experimental and control classes were determined using the independent samples t-test and MANOVA. Data collection techniques involved administering 30 multiple-choice questions to assess cognitive learning outcomes and 15 multiple-choice questions to assess critical thinking skills on wave material. Based on data analysis, it was concluded that the null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) was accepted. This indicates that the implementation of the Problem-Based Learning model assisted by the WordPress web had a significant effect on students' critical thinking skills and cognitive learning outcomes in the topic of waves in Grade VIII of MTs Negeri 2 Kota Tasikmalaya for the 2024/2025 academic year.

Keywords: *problem-based learning, critical thinking skills, cognitive learning outcomes, WordPress web, waves.*