ABSTRACT

PANI MELANI. 2025. THE EFFECT OF DISCOVERY LEARNING MODEL ASSISTED BY MICROSOFT COPILOT ON STUDENTS' PROBLEM-SOLVING SKILLS AND COGNITIVE LEARNING OUTCOMES (An Experimental Study On The Ecosystem Topic In Grade X Of SMAN 2 Ciamis, Academic Year 2024/2025).

Department of Biology Education, Faculty of Teacher Training and Education, Siliwangi University.

This study aims to determine the effect of the Discovery Learning model assisted by Microsoft Copilot on students' problem-solving skills and cognitive learning outcomes on the topic of ecosystems. The method used in this study was quasi-experimental. The research was conducted at SMAN 2 Ciamis in the 2024/2025 academic year, with the population being all Grade X classes, consisting of twelve classes. The sample was selected using purposive sampling, resulting in class XE-2 as the experimental group and class XE-3 as the control group. Data collection techniques included a problem-solving test consisting of 10 essay questions and a cognitive learning outcomes test consisting of 31 multiple-choice questions. The results showed that the average posttest score for problem-solving skills in the experimental class was 33.17, while in the control class it was 26.81. Meanwhile, the average posttest score for cognitive learning outcomes in the experimental class was 25.31, and in the control class it was 23.22. The data were analyzed using ANCOVA, which showed a significance value of 0.000 < 0.05, indicating that the null hypothesis (H₀) is rejected. Thus, the study concludes that the Discovery Learning model assisted by Microsoft Copilot has a significant effect on students' problem-solving skills and cognitive learning outcomes on the ecosystem topic in Grade X of SMAN 2 Ciamis.

Keywords: Discovery Learning, Microsoft Copilot, Problem-Solving Skills, Cognitive Learning Outcomes, Ecosystem.