ABSTRACT

INDRI IZNI IZMIATI 2023. *ApplicationDiscovery Learning (DL) Assisted Artificial Intelligence Learning System (AILS) On Communication Skills and Cognitive Learning Outcomes of Students in Biology Learning (Experimental Study in Class XI MIPA SMA Negeri 4 Tasikmalaya 2022/2023).* Biology Education Department Thesis. Faculty of Teacher Training and Education, Siliwangi University.

This research is motivated by increasingly rapid and sophisticated technological developments that have brought changes to the learning process. One of the technological developments that is currently being discussed isArtificial Intelligence (AI). One example of artificial intelligence in the field of education isArtificial Intelligence Learning System (AILS). The aim of this research is to determine the effect of implementing the modeldiscovery learning AILS assisted communication skills and cognitive learning outcomes of students on excretory system material in class XI SMA Negeri 4 Tasikmalaya. The research method used is quantitative experimentationthe matching-only posttest-only control group design. The population of this study was all class XI MIPA SMA Negeri 4 Tasikmalaya for the 2022/2023 academic year. Samples were taken using the techniquePurposive Sampling Based on the criteria for students who have cell phones as well as recommendations from teachers based on similarities in class average scores, we get class XI MIPA 1 with 35 students and XI MIPA 2 with 34 students. The data collection techniques used are tests, observation and documentation. The analysis techniques used are validity testing, observation data analysis, prerequisite testing and hypothesis testing using the ANCOVA test. The results of the hypothesis test showed a significance value of 0.020 or a significance value of < 0.005 so Ho was rejected. So that the results show that the application of discovery learning assisted by artificial intelligence learning system has an influence on oral communication skills and cognitive learning outcomes of students.

Keywords: Discovery learning, Artificial Intelligence Learning System, Communication Skills, Learning Outcomes