ABSTRACT

Maulidya Ainun Qolbi. 2023. ***THE EFFECT OF PICTORIAL RIDDLE-TYPE INQUIRY LEARNING MODEL ON STUDENTS' PROBLEM-SOLVING ABILITY IN VECTOR***

This study was motivated by the problem-solving ability of 11th-grade students at Pasundan Banjaran High School which is included in the moderate category. Students lack an understanding of physics concepts, the ability to answer questions without first understanding the problem, and the use of fewer varied learning models are reasons students have limitations in problem-solving skills. The efforts made by researchers to overcome these problems are using the Pictorial Riddle Type Inquiry learning model, where the model can trigger students to solve problems in the form of riddles, in groups. This research used a quasi-experimental method with a posttest-only control design. The sampling technique used was cluster random sampling. The research population includes all 11th-grade students from Pasundan Banjaran High School in 2023/2024 academic year, where 11th-grade 5 is the experimental group and 11th-grade 6 is the control group. The test was given in 9 essays based on indicators of problem-solving ability according to Docktor and Heller. After conducting a hypothesis test using the t-test at the significance level (α=0,05) it is proven that after applying the Pictorial Riddle Type Inquiry model obtained $t_{count} > t_{table}$ then H_0 is rejected. At the 95% confidence level, the Pictorial Riddle Type Inquiry learning model affects students' problem-solving skills on the topic of vector in the 11th grade of Pasundan Banjaran High School in the 2023/2024 school year. In addition, the pictorial riddle model can be used to train students' visualization skills to improve their ability to identify riddle patterns and formulate solutions based on the given problems.

Keywords: *Inquiry Learning Model of Pictorial Riddle Type, Problem-Solving Ability, Vector.*