## ABSTRACT

## Siti Mutoharoh. 2024. THE EFFECT OF THE E-LKPD-ASSISTED AUDITORY INTELLECTUALLY REPETITION (AIR) LEARNING MODEL ON STUDENTS' PROBLEM-SOLVING ABILITIES ON HEAT MATERIAL

The problem solving abilities of students at SMA Negeri 1 Jatiwaras are classified as low, this is a motivation for researchers to apply a learning model that is considered capable of helping improve students' problem solving abilities, namely the Auditory Intellectually Repetition (AIR) learning model. The aim of this research is to analyze whether the Auditory Intellectually Repetition (AIR) learning model has an effect on students' problem solving abilities in high school physics material. The research method used was a quasi experiment with a noequivalent control group design. This research was carried out at SMA Negeri 1 Jatiwaras with the research population, namely class The samples used were selected using Purposive Sampling Technique to obtain samples namely class XI-2 as the control class and class XI-3 as the experimental class with each class totaling 35 students so that the total sample is 70 students. Students' problem solving abilities in this study were measured using a written test in the form of a description which contained four indicators of problem solving abilities before and after being given treatment (pretest and post-test) using the AIR learning model. This test consists of 5 descriptive questions that represent the four indicators of problem solving abilities in heat material. The results of hypothesis testing using the t test show that  $t_{hitung} > t_{tabel}$  with a significance level of 5%, meaning that  $H_0$  is rejected and  $H_a$  is accepted. So it can be concluded that the Auditory Intellectually Repetition (AIR) learning model assisted by E-LKPD has an effect on the problem solving abilities of class XI students at SMA Negeri 1 Jatiwaras in the 2023/2024 academic year.

Keywords: problem solving ability, AIR learning model, heat.