ABSTRACT

Aprilliya, Sartika Ayyu. (2024). *Improving Problem-Solving Ability and Habits of Mind of High School Students in the Wolfram Alpha Assisted Creative Problem Solving* (CPS) *Learning Model*.

Problem solving ability is one of the goals of mathematics learning at school. In reality, Indonesian students' problem solving abilities are still relatively low. Apart from that, Indonesian students' habits of mind are still in the low category. This research aims to 1) To find out whether there is an increase in the problem solving abilities of students who use the Creative Problem Solving (CPS) model which is higher than students who use conventional learning models, 2) To find out whether there is an achievement in the habits of mind of students who use the Creative Problem Solving model (CPS) is better than students who receive conventional learning models, 3) To determine the correlation between mathematical problem solving abilities and habits of mind of students who use the Creative Problem Solving (CPS) model assisted by Wolfram Alpha. This research uses a quantitative approach with quasi experimental design techniques. This research sample consisted of two groups, namely the experimental group which was treated with the Creative Problem Solving (CPS) model with the help of Wolfram Alpha. This experimental class consists of members of class X IPS I. Class X IPS III is the control group who received conventional learning. In this research, the data collection technique uses several instruments, namely a problem solving ability test in the form of description questions and a questionnaire in the form of statements of students' habits of mind. The data analysis technique uses SPSS 25 for Windows. The results of this research show that 1) The increase in problem solving abilities of students who use Creative Problem Solving (CPS) is higher than students who use conventional learning models, 2) the habits of mind of students who use the Creative Problem Solving (CPS) model are better than students who received the conventional learning model, 3) Problem solving abilities and habits of mind using the model have a correlation with Creative Problem Solving (CPS) assisted by Wolfram Alpha.

Keywords: Problem Solving Ability, Habits of Mind, Creative Problem Solving assisted by Wolfram Alpha