ABSTRACT

Rionaldo M Tamba, ID 4172121015 (2017). The Implementation of Problem Based Learning Model to Increase Physics Learning Outcomes of Class XI MIA in SMA Parulian 1 Medan

This study aims to know the learning outcomes due to the implementation of problem based learning model about statics fluids topic in class XI MIA in SMA Parulian 1 Medan. The type of this research is quasi-experimental. The population in this study were all students of class XI MIA. The research sample was determined by means of random sampling, namely XI MIA 2 as the experimental class applied problem-based learning model and class XI MIA 1 as the control class applied conventional learning each totaling 36 people. The instrument used to determine student learning outcomes is a cognitive test in the form of multiple choice with a total of 15 questions that have been validated by experts.

The results showed that the average pretest value of the experimental class was 35.74 and the control class was 33.90. After being treated, the posttest results for the experimental class were 70.93 and the control class was 57,96. Using the one-sided t test, it is obtained that t count > t table (4.88 > 1.99). So it can be concluded that there is a significant effect due to the use of problem based learning models on student learning outcomes on static fluid topic.

Keywords: Problem Based Learning, Learning Outcomes, Static Fluids