ABSTRACT

Fidya Witria'Ash Suci, NIM 4182151007 (2018). The Influence of Project Based Learning (PjBL) Models Integrated STEM Approach on Students' Problem Solving Ability.

This research aims to determine the influence of Project based learning (Pjbl) models integrated STEM approach on students' problem solving skills at SMP Negeri 14 Medan. The type of the research used *quasi-experiment* with non-equivalent control group design as a research design. The sample of the research used purposive sampling with 60 students consisting of 30 students from class VIII-B as a class experiment and 30 students from class VIII-A as control class. Research Instruments used in form of five essay questions after validated and LKPD assessment to know students' problem solving ability skill. The result of this study indicate a significant influence of students' problem solving ability. The experimental class have the average score 87.33 and average score in control class is 71.7. and the average score on LKPD Assessment in experimental class is 89, then the control class is 78 from five indicator of problem solving:understanding to the problem given, able formulate the problem, can designing solutions, able apply solutions designed, able evaluate solutions, as well as have more teamwork. The students' problem solving ability in experimental class is greater then control class. The result of the t-test independent sample test show that the 2-tailed significance < 0.05. The conclusion is the project based learning (PJBL) models integrated STEM can increased students' problem solving ability on substance pressure materials and its application in daily life.

Keywords: Project Based Learning, STEM, Problem Solving, Substance and Pressure

