The Ability of Student in Solving Contextual Problem with Problem Based Learning Model in Dynamic Electricity Concept at Grade X SMANegeri 2 Lintongnihuta Academic Year 2015/2016

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ABSTRACT

Problem Based Learning, which is a teaching approach that uses real-world problems as a context for students to learn about critical thinking and problem solving skills, as well as to acquire the knowledge and concepts are the essence of the subject matter. This research aimed to know and describe the ability of student’s in solving contextual problem with problem based learning about dynamic electricity.

This research employed a quasi experimental pretest and posttest with control design. The populations were 60 students grade X-science in SMA N 2 Lintongnihuta academic year 2015/2016. The samples consist of two classes, one class with 30 students as experiment class and one class as control class with 30 students, while the sampling technique used cluster random sampling. Research instrument used essay test of solving contextual ability. The data obtained in the study were analyzed by the computer program Ms.Excel

From the research the pre-test average value of experiment class 26.66 and control class 27.83, after giving the treatment the post-test with the average value of experiment class 59.66 and control class 49.50. The result of t test $t_{\text{count}} = 3.158$ while $t_{\text{table}}= 1.661$. Because $t_{\text{count}} > t_{\text{table}} (3.158 > 1.661)$ so $H_0$ rejected. The result showed that student’s solving contextual problem ability in experiment class had been treated with problem based learning model had been significantly different from control class which had been treated with conventional learning. In addition, the improvement of solving contextual problem skill in PBL class was greater than in control class. This meant implementation project based learning has a significant effect toward student’s solving contextual problem skill.

Keyword: Contextual problem, problem based learning, quasi experimental.