

**THE INFLUENCE OF PROBLEM BASED LEARNING METHOD
TOWARD STUDENTS' SEQUENCE AND SERIES PROBLEM
SOLVING ABILITY IN THE TWELFTH GRADE OF
SMA NEGERI 2 BALIGE 2012/2013**

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ABSTRACT

The objective in this research was to know the influence of problem based learning toward students' sequence and series problem solving ability and was there any difference of students' activity using problem based learning and conventional method in twelfth grade of SMA Negeri 2 Balige.

The population in this research was all students in twelfth grade of SMA Negeri 2 Balige that was divided into seven classes. The sample of this research was 64 students that were divided into two classes; those were 30 students in Natural Science 2 that was taught by using problem based learning method and 34 students in Natural Science 4 that was taught by using conventional method.

In experiment class that used problem based learning method, the matter was delivered by teacher as guide and the students discussed in each group. There were 4 or 5 students in one group. Teacher didn't tell which group would present the discussion result in order to increase the students' seriousness. The test was given after giving treatment.

From the research result, the average of using problem based learning method after treatment in experiment class was 88.5 (90%) and in the control class was 79.03 (56%). Deviation standard in experiment class was 7.45 and in control class was 8.03. Before hypothesis testing, firstly normality and homogeneity were tested. And from the test, both samples are normal and homogeneous. t -test is used in hypothesis test and gotten $t_{test} = 4.8034$ with the significant level $\alpha = 0.05$ then $t_{table} = 1.6703$. Based on the testing criteria where $t_{test} > t_{table}$ then H_a was accepted with the result $4.8034 > 1.6703$. Means that there was difference students' problem solving ability that was taught by using problem based learning and conventional method. The students' problem solving ability that was taught by using problem based learning method was better than conventional method. Then can be seen the significant influence of students' problem solving ability that is taught by using problem based learning method.

Key Words: *Problem Based Learning Method, Conventional Learning, Problem Solving Ability*