THE EFFECT OF PROBLEM BASED LEARNING MODEL (PBL) ASSISTED ANIMATION TO INCREASE STUDENT'S LEARNING OUTCOMES ON TOPIC HEAT AND TEMPERATURE AT GRADE X-SCIENCE IN SMAN 1 BERASTAGI ACADEMIC YEAR 2015/2016

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ABSTRACT

The introduction of material authentically accompanied with active learning ,that is the learning process very effective to increase student learning outcomes. The aim of this research to determine the effect of Problem Based Learning model assisted animation to increase student learning outcomes.

This research is a quasi-experimental. The instruments that used in this research was 10 essay test that have been pass validity test. The population on this research were all students of class X SMA Negeri 1 Berastagi while the sample that taken was two classes ,that is X MIPA 7 and X MIPA 8 where X MIPA 8 as the experimental class taught with Problem Based Learning Model and X MIPA 7 as control class was taught with conventional learning model.

There are two kinds of research data that is in form of learning outcomes and observation of student activity. The data on learning outcomes was begins with normality and homogeneity test. The data has been distributed normally and homogeneous so it was tested with statistical t-test at significance level $\alpha = 0.05$. The average results of students learning outcomes on experiment class was 87.53 while the control class was 85.14. The activity data are presented on percentage of individual activity classically . The activity for classes taught with PBL model was reach 82.01, while the class taught by conventional learning model was 60.26. There was increasing of students activity with problem based learning model as much as 26.52 %. There was effect of PBL assisted animation to increase student learning outcomes on topic Heat and temperature at grade X-science in SMAN 1 Berastagi with $t_{count} > t_{table} = 2.77 > 1.67$, so that H_0 is refused and H_a is accepted .

Keyword: Problem Based Learning, Conventional, Activity, Learning outcomes