

**THE DEVELOPMENT OF PROBLEM BASED LEARNING (PBL)
WITH INNOVATIVE STUDENT WORKSHEET (LKS)
TO INCREASESTUDENT ACHIEVEMENT
ON TOPIC ACIDS AND BASES**

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ABSTRACT

The Development of Problem Based Learning (PBL) with Innovative Student Worksheet (LKS) to Increase Student Achievement on Topic Acid and Base is explained. The aim of this research, to obtained Student Worksheet (LKS) who have met the eligibility Criteria presentation standards BSNP, How student achievements improve problem based learning (PBL) with innovative student worksheet (LKS) on the topic of acid-base, the research sample take at random sampling of two class as experiment and control class. As a means of collecting data used objective test of student achievement that are 20 questions that test the validity, reliability of 0.681, level of difficulty and distinguishing matter. The results of data processing showed the students in the experiment class the average value of the pre-test 37.83 and post-test 82.00 with the average gain is 0.688. The pre-test and post-test the experimental class is normal where normality pre-test 9.15 and the post-test normality 8.2. While students in the control class having an average value of pre-test 25.5 and post-test 51.17. Average gain is 0.427. The pre-test and post-test in normal control class is where the normality of pre-test of 10.9 and a post-test normality of 9.25. Homogeneity of data can be seen from the pre-test and post-test which proved to be homogeneous. Pre-test on former experiment class and control class is 1.743 and post-test at the former experiment class and control class is 1.125. While the percentage increase in the results of the experimental class learning to be 68.8% and 42.7% in the control class. Where the result of the t_{count} right parties obtained $t_{\text{count}} = 6.200$ greater than $t_{\text{table}} = 1.672$. $t_{\text{count}} > t_{\text{table}}$ ($6.200 > 1.672$) at $\alpha = 0.05$ in which the increase of 37.81%. Base on the perception of chemistry Lecturer (as validator expert) and chemistry teacher to Problem Based Learning (PBL) with innovative student Worksheet (LKS) developed on topic Acid-Base are good views of the average of 3.699 validation value, which means Problem Based Learning (PBL) with Innovative student worksheet (LKS) on Topic Acid-Base in class XI in accordance curriculum in 2013 was valid and worth used.

Keyword: PBL, Innovative Student Worksheet (LKS), Acid-Base