

**STUDI PERBANDINGAN PEMBELAJARAN  
PBL DENGAN PEMBELAJARAN KONVENSIONAL PADA KONSEP  
KEANEKARAGAMAN HAYATI**

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**ABSTRACT**

This study aims to determine the increase in metacognitive skills of students as students learning outcomes between the use of *problem based learning* (PBL) with the conventional concept of biodiversity. This research was conducted in MAN Cianjur class 10 of 5th science and 10 of 6th science. This study in August the first semester of school year 2016-2017. The method used is a quasi-experimental research design with *pretest posttest* control group design . Where in the treatment pretest before being treated using problem based learning (PBL) with Conventional. Measurement of learning outcomes by using a written test in the form of multiple choice questions of 15 questions with 5 possible answers. The results showed that the average value of an increase learning outcomes. The average value of *pretest* before learning PBL at 57.675 while the highest value of 80 and lows 33. The average value *posttest* after PBL learning at 78.05 while the highest value of 100 and the lowest value of 50. While the average value of pretest before conventional learning 50.692. 74 highest value and the lowest value of 28. The average value posttest after conventional learning at 68.65 with a highest score 99 and the lowest value of 39. Hypothesis testing data obtained from the results of paired t test at significance level was  $p - value = 0.002 < \alpha = 0.05$ , ekseperimen class better than the control class at the end of the test (posttest). Scale student responses showed that the problem based learning can provide positive values in students. Use of problem based learning (PBL) can enhance metacognitive skills of students as a result of student learning with conventional learning the concept of biodiversity with a higher category than conventional learning.

Keywords : problem based learning (PBL), improved learning outcomes, cognitive level, biodiversity.