

**APPLICATION OF PROBLEM BASED LEARNING (PBL) LEARNING
MODELS ON MATHEMATICS LEARNING ON CRITICAL THINKING
ABILITY AND SELF-REGULATED LEARNING OF HIGH SCHOOL
STUDENTS**

By
NUR SILVIA APRIANI
NIM 145050023

ABSTRACT

This study aims to determine whether students' critical thinking skills who get Problem Based Learning (PBL) learning models are better than students who get Conventional learning, and to find out whether Self-Regulated Learning is better than students who obtain Conventional learning models, as well as to find out whether there is a correlation between Self-Regulated Learning students who obtain Problem Based Learning (PBL) learning models. This research is an experimental power with the research design of the control pretest-posttest group and using random sampling technique. The experimental class gets the Problem Based Learning learning model and the control class gets conventional learning models. This research was conducted in one high school. The population of this study was high school with a sample of the study were students of class X SMA 7 Pasundan in Bandung, West Java Province with the research respondents were students of class X as many as two classes selected randomly. The results showed that students' critical thinking skills who received Problem Based Learning (PBL) learning were better than students who obtained Conventional learning models, Self-Regulated Learning students who got better Problem Based Learning (PBL) learning models than students who obtained the model Conventional learning, and there is a positive correlation between critical thinking skills and Self-Regulated Learning students who obtain Problem Based Learning (PBL) learning models. Problem Based Learning (PBL) and conventional learning models have a different influence on the ability to think critically and Self-Regulated Learning of high school students.

Keywords: *Mathematical Critical Thinking Ability, Self-Regulated Learning, Problem Based Learning (PBL) Learning Models, Conventional Learning Models*