

ABSTRAK

GIANTHIE JENITA, Upaya Meningkatkan Kemampuan Representasi Matematis Melalui Penerapan Model *Problem Based Learning* (PBL) Siswa Kelas X MIA 1 di SMAN 4 Bekasi. SKRIPSI. Program Studi Pendidikan Matematika, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Negeri Jakarta, 2016.

Based on the early observation and test results of mathematical representation ability of the 10th grade Math and Science Class in SMAN 4 Bekasi, it is shown that the ability of mathematical representation of the students was still low so that it needed to be improved. In this case, Problem Based Learning (PBL) model could be one of the alternatives in implementing mathematics learning in the class. PBL model consists of five phases which are students' orientation on the problem, organizing the students to study, guiding students' experiences, developing and presenting attainments, and also, analyzing and evaluating problem solving process. Each phase could improve students' mathematical representation ability in the learning. The purpose of this research is to improve the mathematical representation ability of the 10th grade Math and Science Class in SMAN 4 Bekasi through PBL model implementation in the learning.

This research is a classroom action research that implemented in three cycles and every cycle consists of four steps which are planning, implementation, analysis, and reflection. Every cycle applied the PBL model. Students were given a quiz as the final test in every cycle to measure their mathematical representation ability. This research was held from April 2016 to May 2016 in X MIA 1 Class in SMAN 4 Bekasi in the school year of 2015/2016 with 40 students.

The result shows that mathematics learning using the PBL model could improve students' mathematical representation ability. It is shown by the improvement of average score of mathematical representation ability in each cycle. The average score of mathematical representation ability of X MIA 1 Class SMAN 4 Bekasi students in cycle I was 57.9, in cycle II improved to 73.9, and in cycle III improved to 83.8. Moreover, the quantity of students who reach Minimum Learning Mastery Standard also improved in every cycle. In cycle I was 7.5% students, in cycle II improved to 52.7% students, and in cycle III improved to 80% students.

Keywords: Mathematical Representation Ability, Problem Based Learning (PBL)