ABSTRACT

NITA ADELYN, *The Effect of Probing Prompting Learning Model with Power Point on Senior High School Students' Mathematical Problem Solving Ability in The District of Duren Sawit. Thesis. Jakarta: Mathematics Education, Department of Mathematics, Faculty of Mathematics and Natural Sciences, State University of Jakarta, 2017.*

Solving various problems in complex and unfamiliar context is the hearth of mathematics activity itself. Therefore, mathematical problem solving ability becomes one that is important to own and practice by each student during the learning of mathematics. Actually, a precise learning will give effects on students' mathematical problem solving ability. The objective of the study is to determine whether there is an effect of Probing Prompting learning model on Senior High School students' mathematical problem solving ability in The District of Duren Sawit.

The research metodology used by this study is quasi experiment. The instrument used by this study is an essay test consists of 4 valid items. The target population of the study is all Senior High School students in District of Duren Sawit. The accessible population is all 10th grade students of public school in District of Duren Sawit. The sampling technique consists of several stages. Simple random sampling technique is the first stage and all 10th grade students of SMAN 91 Jakarta become the sample. The second stage is using purposive sampling technique, a technique which requires the sample (the classes) to follow a consideration, in this case, all the classes should be taught by the same teacher. The sample of this stage is all 10th grade of science classes namely X-1, X-2, X-3 and, X-4. The third stage is using cluster random sampling technique by randomly picking 2 of 4 classes that have been valid earlier and checked by some before-treatment tests in order to fulfill the data analysis' prerequisites. X MIA 2 and X MIA 3 become the experiment class and control class respectively.

According to the result of the after-treatment tests, both of the classes are normally distributed and homogen. Thus, the chosen hypothesis testing is t-Test for 2 independent samples, using $\alpha = 0{,}05$ *as its level of the significance. The hypothesis testing shows that* $t_{hitung} = 2{,}3729$ *and* $t_{tabel} = 1{,}667$*. The comparison is* $t_{hitung} > t_{tabel}$*, so* H_0 *is rejected and one can conclude that there is difference between the mean score of mathematical problem solving ability test of experiment class and control class, with the mean score of mathematical problem solving ability test of the experiment class' is higher than the control class'. This study concludes that there is effect of Probing Prompting learning model with Power Point on Senior High School students' mathematical problem solving ability in District of Duren Sawit.*

Key words *: Probing Prompting Learning Model, Power Point, Mathematical Problem Solving Ability.*