ABSTRACT

NUR KHOLIFAH SEPTIYANA. The Effect of Probing Prompting Learning to Student's Mathematical Connection Ability at SMP Negeri 209 Jakarta. Mini Thesis, Mathematics Education, Faculty of Mathematics and Natural Sciences, Universitas Negeri Jakarta. July 2022.

The purpose of this study is to examine the effect of probing prompting learning model on students' mathematical connection abilities. Quantitative research design employing a quasi-experimental and a posttest-only control group. SMP Negeri 209 Jakarta conducted research on Flat Sided Space material during the even semester of the 2021/2022 academic year. Experimental class is VIII-H, and control class is VIII-G. Cluster random sampling method was used, with both classes having a normal distribution, homogeneous distribution, and the same average. The experimental group was given the probing prompting learning model, while the control group was given the conventional learning model. After treatment, The Liliefors normality test and Fisher's homogeneity test results revealed that the experimental and control classes were normally distributed and homogeneous. Statistical hypothesis testing with t-test with significance level $\alpha = 5\%$, yields $t_{count} = 3,7548 > t_{table} = 1,6649$, indicating that H_0 is rejected indicating that there is an effect of probing prompting learning on student's mathematical connection ability. According to the findings, the average mathematical connection ability of experimental class students is 63,00 with a standard deviation of 21,8620, whereas the average mathematical connection ability test results of control class students are 45,51 with a standard deviation of 19,4258. The magnitude of the effect tested using Cohen's Effect Size test is 0,8 and is classified as Large with a Percent of Non Overlap of 47,4%.

Keywords. Probing prompting, conventional learning, the effect of learning model, mathematical connection, flat sided space material.