**ABSTRACT**

The thesis is entitled: "Problem Based Learning Model to improve communication and mathematical connections Students". Masters of Education program study of mathematics. Pasundan University Bandung.

This research background is based on the lack of communication and student mathematical connections that result in low student achievement in school. One effort that can be done in addressing the lack of communication skills and mathematical connection is through the selection of teaching methods that emphasize student centered learning through Learning Problem Based Learning.This research aim to know which improvement of communication capabilities and better mathematical connection between the students carry out learning the Learning model Based Learning and student who carry out the study with expository and the effect on the attitude of students in learn. Instruments used in this research is to test the ability of communication and mathematical connections as well as the attitude questionnaire.The population in this study were students of SMP Negeri 1 Sukatani Regency Purwakarta. While samples taken at random two classes according to the class. This research method is embedded design using the Mixed Method strategies and classroom action research. The results of the study are as follows: 1) Improved communication skills and connections that use the students' mathematical learning Problem Based Learning is better than the students who use expository based early mathematical ability level (high, medium, low); 2) The attitude of the students to learn the use of learning Problem Based Learning is better than the students who use expository; 3) Learning Problem Based Learning can improve communication skills and students' mathematical connections; 4) There is a correlation between communication' skills mathematical connection with attitude of student learning. Recommendation 1) for teachers: Learning Problem Based Learning should be one of the implmented well; 2) for school principals the facilitiy to develop a learning model Problem Based Learning; 3) for students learning Problem Based Learning can improve communication skills, mathematical connections and attitudes as well as other mathematical abilities; 4) for further researcher examining the learning Problem Based Learning on the ability of other mathematics skills beyond the ability of communication and mathematical connections examine the different levels of school.

Keywords: Learning Problem Based Learning, communication skills and mathematical connections of students and student’ attitude learning.