In learning mathematics is closely associated with the process of communicating. The ability to analyze and creativity is needed in addressing various problems in mathematics. Using conventional learning models to make child saturated and less creative because there are only learning resources to teachers, children tend to just memorizing formulas but do not understand any of the material presented, so as to have a low communication skills. Therefore, researchers using Creative Problem Solving learning model that is expected to enhance creative thinking and motivated to think creatively solve any math problem. This study aims to determine the application of Creative Problem Solving learning model to increase communication capabilities mathematics and attitudes towards the use of Creative Problem Solving learning model. This study used an experimental method. The population in this study were all students of class XI SMA Negeri 16 Bandung, while samples were taken two classes at random. Instruments used in this research is to test students' communication skills in the form of mathematical description of test and attitude scale. Tests tested prior to the 32 students of class XI SMA Negeri 16 Bandung. Based on trial results Instrument (matter) are all a matter eligible to be used in research. The results of this study are 1) to improve communication skills of students who received teaching mathematics using Creative Problem Solving learning model is better than students who received learning by using conventional learning models, 2) students' positive attitudes towards learning by using Creative Problem Solving learning model. Therefore, learning by using Creative Problem Solving learning model can be used as an alternative for teachers in implementing the learning.

Keywords: Creative Problem Solving (CPS) and the Mathematical Communication Ability