ABSTRACT


The research was intended to: (1) determine whether improvement in the capability of understanding mathematic concepts of the students who received a Concrete-Pictorial-Abstract (CPA) learning model is higher than that of the students who received a conventional learning; (2) determine whether the self-efficacy of the students who received a Concrete-Pictorial-Abstract (CPA) learning model is higher than those who received a conventional learning; and (3) determine whether there is a positive correlation between the capability of understanding mathematic concepts and self-efficacy of the students who received a Concrete-Pictorial-Abstract (CPA) learning model. The research method used was a quasi-experimental with an experimental research design of pretest-posttest control group. The research population was the grade-VII students of SMP Negeri (State Junior High School) 35 of Bandung, academic year of 2018/2019. The research sample consisted of two classes, i.e., class VII B as the experimental class, where Concrete-Pictorial-Abstract (CPA) learning model was implemented, and class VII C as the control class, where conventional learning, that is, expository learning model, was implemented. The research instrumental used was test essays of the capability of understanding mathematic concepts and self-efficacy scale. The test was tried out in class VIII. From the try-out result, seven items of problems were used to test. After being collected, the data were then processed by using a IBM SPSS 23.0 for windows software. Based on the research result, it was obtained that: (1) The students who received Concrete-Pictorial-Abstract (CPA) learning model got a higher improvement in capability of understanding mathematic concepts than the students who received conventional learning did. (2) The self-efficacy of the students who received Concrete-Pictorial-Abstract (CPA) learning model was better than that of students who received conventional learning. And (3) There was a positive correlation between the capability of understanding mathematic concepts and self-efficacy of the students who received Concrete-Pictorial-Abstract (CPA) learning model.

Keywords: Capability of Understanding Mathematic Concepts, Concrete-Pictorial-Abstract (CPA) Learning Model, and Self-efficacy.