ABSTRACT


Mathematical representation ability has an important role in the success of students in mastering mathematics material. In addition to the cognitive aspects of students, it needs also to be considered the affective aspects of students because they have very close relationships. One of them in the aspect of developing student attitudes is self-efficacy. This study aims at knowing (1) the increase of students’ mathematical representation ability who obtain REACT (Relating, Experiencing, Applying, Cooperating, Transfering) learning models better than students who obtain ordinary learning models; (2) the ability of students’s self-efficacy who obtain REACT learning models is better than students who obtain ordinary learning models; and (3) the effectiveness of REACT learning models on students’ matematical representation abilities. The method used in this study is the quasi-experimental. The population in this study were all eighth grade of SMPN 1 BALEENDAH. The sample in this study concicts of two groups taken randomly. The instrument used in this study is a description of the mathematical representation ability test and self-efficacy scale. Data analysis was carried out using t-test and effect size test. The results of the study show that: (1) Increasing the mathematical representation ability of students who obtain learning by using the REACT learning model is higher than students who obtain ordinary learning models; (2) Self-efficacy of students who obtain learning using REACT learning models is better than students who obtain ordinary learning models; and (3) REACT learning model has great effectiveness in increasing students’ mathematical representation abilities.

Keywords: Mathematical Representation Ability, Self-efficacy, REACT (Relating, Experiencing, Applying, Cooperating, Transfering) Learning Model.