

ABSTRACT

Fatmawati. (2018). The Improvement of Mathematical Communication Ability and Self-Awareness of Junior High School Students through the Auditory, Intellectually and Repetition (AIR) Learning Model.

The mathematical communication ability of students is still relatively low. One alternative learning that can improve mathematical communication ability is the AIR learning model. The purpose of this study are: 1) Knowing whether the increase in mathematical communication skills of students who obtain the AIR learning model is better than students who obtain conventional learning; 2) Knowing the self-awareness of students who obtain the AIR learning model better than students who obtain conventional learning; 3) Knowing the positive correlation between student self-awareness and mathematical communication skills of students who obtained the AIR learning model; 4) Knowing the positive correlation between student self-awareness and mathematical communication skills of students who obtain conventional learning models. The study used a quasi-experimental research method. The design of this study is the design of a non-equivalent control group. The population in this study is all students of class VII SMP Muhammadiyah 3 Bandung. The sample of this research is the students of class VII A as the experimental class and the students of class VII B as the control class. The research instrument is a test of mathematical communication ability questions and a self-awareness questionnaire. Data analysis through IBM SPSS 20.0 for Windows software program and Microsoft Excel software. The results of the study show: 1) Mathematical communication ability of students who get the AIR learning model is better than students who get conventional learning models; 2) Self-awareness of students who get the AIR learning model better than students who get conventional learning models; 3) There is a positive correlation between self-awareness and mathematical communication ability of students who get the AIR learning model; 4) There is no positive correlation between self-awareness and students' mathematical communication skills that get conventional learning model. Therefore, the AIR learning model can be used as an alternative for teachers in carrying out their learning to create an active learning atmospher.

Keywords: Mathematical Communication Ability, Auditory, Intellectually and Repetition (AIR) Learning Model, Self-Awareness.