ENHANCING STUDENT’S MATHEMATICAL COMMUNICATION ABILITY USING AUDITORY, INTELLECTUALLY, AND REPETITION MODEL IN EIGHT GRADE SMP NEGERI 2 PANAI TENGAH ACADEMIC YEAR 2015/2016

Mahendra Galang Pratama (NIM. 4113312009)

ABSTRACT

This research aims to: (1) enhance student’s mathematical communication ability using Auditory Intellectually Repetition (AIR) model; (2) to describe learning activity enhancement through AIR model.

This research is a classroom action research (CAR) consists of two cycles with two meetings for each cycle. The subject is thirty students in grade VIII – 1 in SMP Negeri 2 Panai Tengah Academic Year 2015/2016. The object of this research is to enhance student’s mathematical communication ability on topic of Solid Polyhedron using Auditory Intellectually Repetition (AIR).

Data come from preliminary test, mathematical communication ability test at the end of each cycle and observation paper for each meeting. The preliminary test reveals that 20 of 30 students (66.67%) passes the test and average scores in preliminary test 64.58 is still low. At the end of cycle I using AIR model, it reveals that 22 of 30 students (73.33%) passes the test. At the cycle II, 26 of 30 students (86.67%) pass the test. It means that there is an enhancement of 13.34% from cycle I. The enhancement of student’s mathematical communication ability shown by Normalized Gain ($g$) is 0.50, in category Moderate and there is a difference between average scores in Cycle I (71.88) and Cycle II (78.47) or there is an enhancement of 6.57 on their average score. At the same time, there is an enhancement on teacher’s activity as provided through observation from 68% in Cycle I to 87% in Cycle II, in category Good. An enhancement of student’s activity also occurs from 67% in Cycle I to 86% in Cycle II, in category Good.

The conclusion is Auditory Intellectually Repetition (AIR) model enhances mathematical communication ability of students in Grade 8 SMP Negeri 2 Panai Tengah. It is strongly recommended that teacher should Auditory Intellectually Repetition (AIR) as a learning activity alternative and always to create some exercises and tests to enhance mathematical communication ability of students.