

ABSTRACT

Tedi kusnadi. The Influence of Brain Based learning model toward the mathematical communication ability and Self-efficacy of senior high school student.

Mathematics is one of subject basic taught in each level of education. The mathematical communication ability indispensable students in understanding mathematics. But Mathematical communication ability student is actually still low. One the alternative learning that would improve the mathematical communication ability is brain based learning strategy. The research was purposed to find out wheter mathematical communication ability of students which uses brain based learning model is better than who students which uses convensional learning, Find out self-efficacy student which uses brain based learning model better than who student which uses convensional learning and to know correlation between self-efficacy with mathematical communication ability. According to the methods, this research is research experiment. Population in this research is all students of class X SMA PGRI Naringgul as many two classes are chosen randomly according to class. An instrument used in the test type of the discussion the questions the mathematical communication skill and Self-efficacy questionnaires using the Likert Scale model. Test and questionnaires tried out first in class XI IPA. Analysis of data is done by SPSS 23 for windows. Based on analysis of data, obtained conclusion: mathematical communication ability students senior high school who received Brain based learning model is better than students senior high scool who received convensional learning; self-efficacy student which uses brain based learning model better than who student which uses convensional learning; there is no correlation between self-efficacy with mathematical communication ability in experiment class; there is negative correlation between self-efficacy with mathematical communication ability in class control. Hence the brain based learning model can be used as an alternative for teachers to create a learning active, and fun.

Keywords : Mathematical Communication, Brain Based Learning, Self-efficacy