ABSTRACT

Desy Puspitasari. (2021). ***Analysis of students' mathematical critical thinking skills and self-efficacy in the application of the brain based learning model.***

Student mathematical critical thinking skills and self-efficacy are important things for every student to have. In reality, students' mathematical critical thinking skills and self-efficacy in Indonesia are still low. One approach that has the opportunity to improve the ability of mathematical critical thinking skills and self-efficacy is the brain based learning model. This study aims to: (1) Analysis of students' mathematical critical thinking skills in the application of brain based learning model. (2) Analysis of student' self-efficacy in the application of brain based learning model. (3) analysis the effect of self-efficacy on mathematical critical thinking abilities. This type of research conducted is library research. The approach used in this research is a qualitative research. Data collection techniques used are editing, organizing, and finding. Data analysis conducted in this research is inductive and interpretive. The result showed that: (1) students' mathematical critical thinking skills increased after the application of the brain based learning model. In some research show that brain based learning model is better than conventional learning in improving mathematical critical thinking skills. (2) Students' self-efficacy increased after the application of the brain based learning model. (3) Self-efficacy influenced students' mathematical critical thinking skills. Student with higher self-efficacy then able to complete all indicators of mathematical critical thinking skills.

Keywords: *Mathematical critical thinking skills, Self-efficacy, brain based learning*