## **ABSTRACT**

Sarifah Sari Maryati. (2019). The Influence of Brain Based Learning Learning Models on Matimatika Learning on Increasing the Critical Thinking Ability and Self Regulated Learning of Middle School Students.

Currently learning mathematics is one of the lessons that are considered difficult and less attractive to many students. Lack of understanding of mathematical concepts or low understanding of mathematical concepts causes students' interest in learning is also very low in mathematics. This can be seen during the teaching and learning process students are not too active in learning, students do not pay too much attention to the teacher's explanation and tend to be busy with their own activities and the teacher still explains and explains the explanation of the material in front. Therefore, a learning model is needed that aims to develop critical thinking skills and self-regulated learning, one of which is the Brain Based Learning learning model. The aim of this researcher is: 1) knowing students' Critical Thinking Ability; 2) knowing the Self Regulated Learning attitude of students who obtain Brain Based Learning with students who obtain expository learning; 3) knowing there is a positive correlation between Critical Thinking and Self Regulated Learning students who get Brain Based Learning and expository learning. The population in this study were class VII students of SMP Negeri 10 Cimahi. The sample in this study is class VII-B (Brain Based Learning) and class VII-D (expository), the instruments used in this study are Critical Thinking tests and students' Self Regulated Learning scale questionnaires. The test used is a subjective type test (description). How to analyze data is with IBM SPSS Statistics 18.0 for Windows. The results show that: 1) students' critical thinking skills who learn the Brain Based Learning approach better than students who obtain expository learning; 2) Attitudes of Self Regulated Learning students who get Brain Based Learning are better than students who get learning expository approaches; 3) there is no correlation between critical thinking and Self Regulated Learning students who get Brain Based Learning and expository learning.

**Keywords**: Brain Based Learning, Critical Thinking Ability, Self Regulated Learning.