

ABSTRACT

Hendrian Wijaya. (2020). *Analysis of Mathematical Critical Thinking Ability through an Open Approach.*

Students have important mathematical abilities, one of which is the ability to think critically. Mathematical critical thinking skills are a prerequisite for students to master other higher mathematical abilities. One of the appropriate learning approaches in improving mathematical critical thinking skills is the Open-ended approach which has 5 stages in the implementation of learning, namely presenting open problems, solving problems, presenting discussion results, discussing student responses (class discussion), and decision making. This study aims to: (1) analyze how the concept of mathematical critical thinking, (2) analyze how mathematics learning through an open-ended approach, (3) analyze how the open-ended approach can improve mathematical critical thinking skills. The method used is qualitative research with the type of literature research. The data sources used are primary data and secondary data. The research technique used is Editing, Organizing, and Finding. The data analysis used was inductive and comparative. The results showed that: (1) The Open-Ended Approach has a positive impact on students' mathematical abilities, (2) The application of an Open Ended approach can develop mathematical critical thinking skills. (3) There is a relationship between mathematical critical thinking skills and an open-ended approach. Which means that the better the Open Ended approach, the better the mathematical critical thinking skills.

Keywords: *Mathematical Critical Thinking Ability, Open Approach*