

ABSTRACT

Mia Rahma Azzahra. (2020). *Analysis of Students' Mathematical Critical Thinking Ability through Project-Based Learning Model*

In learning mathematics students need mathematical critical thinking skills because the ability to think critically in mathematics can help students understand mathematics, but students' critical thinking skills are still low. One of the learning alternatives that can improve mathematical critical thinking skills is the Project-Based Learning model. The objectives of this study were to 1) analyze the concept of students' mathematical critical thinking skills, 2) to analyze the effectiveness of the Project-Based Learning model on students' mathematical critical thinking abilities, and 3) to analyze the differences in students' mathematical critical thinking skills through the Project-Based Learning model. The method used in this research is a qualitative method with the type of research research literature. Sources of data used in this study are primary data and secondary data. The research technique used is editing, organizing, and finding. The data analysis used was deductive, interpretative, and comparative. Based on data analysis, it can be concluded as follows: 1) The ability to think critically in mathematics is indispensable in learning mathematics, because mathematical critical thinking is the ability to think which increases students' self-confidence, consequently it will foster student activeness in learning mathematics, increase students' longer understanding ability, and being able to solve the problems that will be faced, therefore the ability to think critically in mathematics learning is needed, and before applying it to learning it is necessary to include indicators of mathematical critical thinking skills, and to measure students' critical thinking skills, make questions that are suitable for aspects of thinking skills mathematically critical. 2) The PjBL learning model can improve students' mathematical critical thinking skills when viewed from the steps of the PjBL learning model and is suitable if it is matched with the indicators of students' mathematical critical thinking abilities. 3) The results of the analysis of differences in students' mathematical critical thinking abilities through the PjBL model, there are several differences, namely using other models besides the PjBL model, including the Problem-Based Learning (PBL) model and the Creative Problem Solving (CPS) learning model, and some are using the approach. Different learning, namely the scientific approach and the learning approach to realistic mathematics, after analyzing the PjBL model, the CPS model, and the PBL model, on the mathematical critical thinking skills. Applying the PjBL model in student learning tends to be more active.

Keywords: *Mathematical Critical Thinking Ability, Project-Based Learning Model*