

ABSTRACT

Aji Sharijal Suhandika.(2021). *Analysis of Mathematical Concept Understanding and Middle School Students' Self-Confidence through Problem Based Learning (PBL)* The use of ineffective learning models makes the learning process passive and monotonous, affecting students' understanding of mathematical concepts and self-confidence. Therefore, in learning mathematics there is a need for a learning revolution that can improve the quality and effectiveness of student learning. A model that can make learning more qualified and develop students 'understanding of mathematical concepts and students' self-confidence is the Problem Based Learning (PBL) learning model. The purpose of this study was to determine: To analyze the students' ability to understand mathematical concepts using the Problem Based Learning (PBL) model; Analyzing students' Self-Confidence ability with the Problem Based Learning (PBL) model; Analyze the implementation of the Problem Based Learning (PBL) model on students' ability to understand mathematical concepts and Self-Confidence. The qualitative approach is the research used in this study. This type of research is library research. The research method uses the documentation method. And the data sources used are primary and secondary sources. Based on data analysis, it can be concluded as follows. 1) Understanding mathematical concepts is an understanding of mathematics which is mastered by the mind and knows ways, procedures and so on. Understanding mathematical concepts has the goal of helping students solve mathematical problems in various ways. Understanding of mathematical concepts also has the following indicators: Restate a given concept; Classify objects according to certain properties according to the concept; Give an example and not from a concept; Presenting various concepts with mathematical representations; Develop the necessary or sufficient conditions of a concept; Using, utilizing, and selecting procedures, or others; Apply concepts to problem solving. 2) Student self-confidence is a student's ability to convince himself to do something right. The characteristics that indicate that the student is confident are: More independent (independent); Not dependent on others; It's not easy to get frustrated; Able to accept new challenges; Have lively but stable emotions; Easy to communicate; Help others. 3) The Problem Based Learning (PBL) model is very effective in improving students' understanding of mathematical concepts and self-confidence because problem based learning is a learning model that focuses on solving problems at school or outside of school. So it can be concluded that problem based learning can be applied, improved, and developed in increasing students' understanding of mathematical concepts and self-confidence.

Keywords: *Understanding of mathematical concepts, Student Self-Confidence, and Problem Based Learning (PBL).*