ABSTRACT

Nurmala Indah Septiany. (2021). Analysis of Mathematical Problem Solving Ability and Self-efficacy of Middle School Students in the Implementation of Problem Based Learning (PBL) Models.

Mathematical problem solving ability and students' self-efficacy are important abilities possessed by students in learning mathematics. The facts in the literature show that there are still many students experiencing difficulties during the problem solving process and the lack of student self-efficacy, causing students' mathematical problem solving abilities and students' self-efficacy to be low. One of the learning models that can assist students in developing mathematical problem solving skills and students' self-efficacy is implementing the Problem Based Learning (PBL) model in the mathematics learning process. This study aims to: (1) analyze students' mathematical problem solving abilities in the implementation of the PBL model; (2) analyzing the self-efficacy of high school students in implementing the PBL model; (3) analyzing the relationship between mathematical problem solving abilities and students' self-efficacy. This study uses a qualitative approach and the type of research used is library research. The data sources used are primary data and secondary data related to mathematical problem solving skills, self-efficacy, and Problem Based Learning models derived from reputable national and international journal articles. The results of this study indicate that: (1) students' mathematical problem solving abilities in the implementation of the PBL model are in the good category. The indicators for improving mathematical problem-solving skills that are most superior to junior and senior high school students are indicators of understanding problems, planning problems and solving problems; (2) students' self-efficacy in implementing the PBL model is generally in the moderate category. The most superior indicators for increasing student self-efficacy are generality and strength indicators; (3) there is no positive relationship between mathematical problem solving ability and students' self-efficacy in implementing the PBL model.

Keywords: Mathematical Problem Solving Ability, Self-efficacy, Problem Based Learning (PBL).