

ABSTRACT

Muhammad Fajar Iskandarsyah (2023). ***Application of Problem-Based Learning with RME Approach to Increase Mathematical Problem Solving Ability and Self-Regulated Learning Junior High School Student.***

Mathematical problem solving ability is the one of essential and fundamental abilities in learning mathematics that every student must have. Beside that case, Student also need to have Self-Regulated Learning to reach better level with starting to apply the habits in their study session. But in case, Mathematical problem solving and Self-Regulated Learning still on to the low level category. An alternative learning that can be applied for upgrade their mathematical problem solving ability and Self-Regulated Learning attitude are Problem-Based Learning with RME approach. The objective from this research is to find out: 1) Increase mathematical problem solving from the Problem-Based Learning student with RME approach); 2) Student with Self-Regulated Learning attitude is much better than the student with regular study); and 3) There is some correlation between mathematical problem solving and Problem-Based Learning with RME approach. Research method using quasi-experiment with nonequivalent control group design. Research operation located on Bandung Junior High School Kartika X-1 with the objective student level on VII. Using purposive sampling as the sample technique, with two sample class, experiment class and control class. The research instrument used was a test instrument in the form of Mathematical problem solving and non-test instrument Self-Regulated Learning questionnaire. Based on the result analysis data, the following conclusions were obtained: 1) The increased mathematical problem solving with RME approach is more higher than regular student; 2) The Self-Regulated Learning attitude to the student have obtained Problem-Based Learning with RME Approach is more much better than regular student; and 3) There is some positive significant correlation between mathematical problem solving and Self-Regulated Learning with RME approach.

Kata Kunci: *Problem-Based Learning with RME Approach, Mathematical Problem Solving Ability, Self-Regulated Learning*