**PENERAPAN MODEL *PROBLEM BASED LEARNING* UNTUK MENINGKATKAN KEMAMPUAN PEMECAHAN MASALAH**

**DAN MOTIVASI BELAJAR MATEMATIKA**

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**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui kemampuan pemecahan masalah dan motivasi belajar matematika siswa pada materi pokok peluang di SMP Swasta Pesantren Al Husna Patumbak melalui model pembelajaran *Problem Based* *Learning.*

Jenis penelitian ini adalah penelitian tindakan kelas yang dilaksanakan dalam 2 siklus, setiap siklus terdiri dari 3 kali pertemuan. Subjek dalam penelitian ini adalah siswa kelas VIII yang berjumlah 20 orang. Objek penelitin ini adalah kemampuan pemecahan masalah dan motivasi belajar matematika siswa.

Data diperoleh dengan menggunakan tes kemampuan pemecahan masalah yang berbentuk uraian yaitu tes kemampuan pemecahan masalah siklus I sebanyak 4 soal dan tes kemampuan pemecahan masalah siklus II terdiri dari 2 soal. Hasil reliabilitas Tes Kemampuan Pemecahan Masalah I (TKPM I) diperoleh nilai rhitung = 0,69 (rtabel = 0,4438) dan Tes Kemampuan Pemecahan Masalah II (TKPM II) diperoleh nilai rhitung = 0,46 (rtabel = 0,4438).

Berdasarkan hasil analisis data setelah pemberian tindakan diperoleh pada siklus I terdapat 14 orang siswa (77,78%) yang memperoleh kategori kemampuan pemecahan masalah sedang atau mencapai ketuntasan belajar dengan rata-rata kelas 64,17. Pada siklus II diperoleh 19 orang siswa (95%) yang memperoleh kategori kemampuan pemecahan masalah tinggi (mencapai ketuntasan belajar) dengan rata-rata kelas 90,25. Dari siklus I ke siklus II diperoleh peningkatan jumlah siswa yang mencapai ketuntasan belajar yaitu sebanyak 5 orang siswa (17,22%) dan nilai rata-rata kelas meningkat sebesar 26,08. Untuk motivasi belajar suber data guru dan siswa. Metode pengumpulan data menggunakan observasi, dan catatan lapangan. Teknik analisis data dilakukan dengan menggunakan metode alur. Keabsahan data dengan triangulasi teknik dan triangulasi sumber. Hasil penelitian, pertama penerapan model *problem based learning* dapat meningkatkan motivasi belajar matematika siswa kelas VIII SMP Swasta Pesantren Al Husna Patumbak Tahun 2018/2019. Kedua, peningkatan motivasi belajar matematika yaitu a) siswa antusias menjawab pertanyaan dari kondisi siklus I 40% dan siklus II 75%, b) siswa antusias bertanya dari kondisi siklus I 37,5% dan siklus II 72,5%, c) siswa antusias mengerjakan tugas dari siklus I 47,5% dan siklus II 85 %.

Berdasarkan hasil penelitian tersebut dapat disimpulkan bahwa terjadi peningkatan kemampuan pemecahan masalah dan motivasi belajar matematika siswa kelas VIII SMP Swasta Pesantren Al Husna Patumbak sehingga pembelajaran dengan menggunakan model *Problem Based Learning* ini dapat dijadikan salah satu alternatif pembelajaran.

Kata Kunci: Model *Peoblem Based Learning*, Kemampuan Pemecahan Masalah, Motivasi Belajar.

**APPLICATION OF THE PROBLEM BASED LEARNING MODEL TO IMPROVE THE TROUBLESHOOTING ABILITY AND**

**MATHEMATICAL LEARNING MOTIVATION**

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**ABSTRACT**

This study aims to determine students' problem solving abilities and motivation to learn mathematics in the subject matter of opportunity in class VIII of the Al Husna Patumbak Islamic Boarding School Private Middle School through a Problem Based Learning learning model.

This type of research is classroom action research conducted in 2 cycles, cycle I consists of 3 meetings and in cycle II consists of 3 meetings. The subjects in this study were 20 Al Husna Patumbak Private Middle School students. The object of this research is learning by applying a Problem Based Learning model to improve students' problem solving skills and motivation to learn mathematics.

The required data is obtained by using a problem solving ability test in the form of a description that is a test of problem solving ability in cycle I as much as 4 questions and a test of problem solving ability in cycle II consists of 2 questions. The reliability of the Problem Solving Ability Test I (TKPM I) obtained a value of r count = 0.69 (rtable = 0.4438) and the Problem Solving Ability Test II (TKPM II) obtained a value of rcount = 0.46 (rtable = 0.4438).

Based on the results of data analysis after giving the action obtained in the first cycle there were 14 students (77.78%) who obtained the category of moderate problem solving ability or achieved mastery learning with a class average of 64.17. In the second cycle, 19 students (95%) obtained a high problem solving ability category (achieving mastery learning) with a class average of 90.25. From the first cycle to the second cycle, there was an increase in the number of students who achieved mastery learning as many as 5 students (17.22%) and the class average value increased by 26.08. For motivation to learn teacher and student data. Methods of collecting data using observation, and field notes. Data analysis techniques are carried out using the groove method. Validity of data by technical triangulation and source triangulation. The results of the study, the first application of the problem based learning model can increase the motivation to learn mathematics in grade VIII Al Husna Patumbak Islamic Boarding School Private Middle School Year 2018/2019. Second, the increase in motivation to learn mathematics is a) enthusiastic students answer questions from the condition of the first cycle 40% and the second cycle 75%, b) students enthusiastically ask from the condition of the first cycle 37.5% and cycle II 72.5%, c) enthusiastic students working on assignments from cycle I 47.5% and cycle II 85%.

Based on the results of these studies it can be concluded that there was an increase in problem solving abilities and motivation to learn mathematics in grade VII students of Al Husna Patumbak Islamic Boarding School so that learning using the Problem Based Learning model could be used as an alternative learning.

Keywords: Problem Based Learning Model, Problem Solving Ability, Learning Motivation