

## ABSTRAK

*Problem Based Learning* juga dikenal sebagai model pembelajaran berbasis permasalahan, memungkinkan siswa lebih aktif dan bekerja sama untuk memecahkan masalah kontekstual. Penelitian ini bertujuan untuk mengetahui apakah ada perbedaan hasil belajar matematika dan interaksi penerapan model pembelajaran *Problem Based Learning* dan *Self Regulated Learning* terhadap hasil belajar matematika siswa. Metode penelitian yang digunakan adalah eksperimen semu. Sampel dalam penelitian ini yaitu siswa kelas XI.1 dan XI.2 SMAS Kartikatama Metro. sampel diambil menggunakan teknik *nonprobability sampling*. Kelas XI.1 menerapkan model pembelajaran *Problem Based Learning* dan kelas XI.2 menggunakan metode pembelajaran *Discovery Learning*. Instrumen yang digunakan meliputi soal tes dan angket *Self Regulated Learning*. Data dianalisis menggunakan analisis variansi dua jalan, kemudian dilanjutkan dengan uji komparasi ganda menggunakan rumus *Scheffe* dengan taraf signifikansi 0,05. Hasil penelitian menunjukkan bahwa siswa yang memakai model pembelajaran *Problem Based Learning* hasil belajar nya lebih baik daripada siswa yang menggunakan model *Discovery Learning*. selain itu, siswa yang memiliki *Self Regulated Learning* tinggi memiliki hasil belajar yang lebih baik dibandingkan dengan siswa yang memiliki *Self Regulated Learning* sedang dan rendah, dan tidak ada interaksi antara penggunaan model pembelajaran *Problem Based Learning* dan *Self Regulated Learning* terhadap hasil belajar matematika siswa.

**Kata kunci:** *Problem Based Learning, Self Regulated Learning, Hasil Belajar*

## ABSTRACT

*Problem Based Learning, also known as the problem based learning model, enables students to be more active and collaborate to solve contextual problems. This study aims to determine whether there is a difference in mathematics learning outcomes and the interaction between the application of the Problem Based Learning model and Self Regulated Learning on students' mathematics learning outcomes. The research method used is a quasi experimental design. The samples for this study were students from class XI.1 and XI.2 at SMAS Kartikatama Metro, selected using nonprobability sampling techniques. Class XI.1 applied the Problem Based Learning model, while class XI.2 used the Discovery Learning method. The instruments used included test questions and a Self Regulated Learning questionnaire. Data were analyzed using two-way analysis of variance, followed by multiple comparison tests using the Scheffe formula with a significance level of 0.05. The results of the study indicate that students who used the Problem-Based Learning model had better learning outcomes compared to those who used the Discovery Learning model. Additionally, students with high Self Regulated Learning had better learning outcomes compared to those with moderate and low Self Regulated Learning. There was no interaction between the use of the Problem Based Learning model and Self Regulated Learning on students' mathematics learning outcomes.*

**Keywords:** *Problem Based Learning, Self Regulated Learning, Learning Outcomes*