ABSTRAK

Devi Fitri Rahmawati, 1212050043, 2025, "Penerapan Model Pembelajaran *Problem Based Learning* Untuk Meningkatkan Kemampuan Penalaran Matematis Dan *Curiosity* Siswa"

Penelitian ini dilatarbelakangi oleh kemampuan penalaran matematis siswa yang masih perlu ditingkatkan. Model *Problem Based Learning* (PBL) menjadi alternatif untuk meningkatkan kemampuan penalaran matematis dan *curiosity*. Tujuan dari penelitian ini untuk mengetahui: (a) Keterlaksanaan proses pembelajaran, (b) Peningkatan kemampuan penalaran matematis siswa dengan model PBL, (c) *Curiosity* siswa yang menggunakan model PBL. Penelitian ini menggunakan metode *Quasi Experiment* dengan desain *Non-Equivalent Control Group Design*, serta instrumen tes tulis yang memiliki validitas tinggi dan sangat tinggi dengan reliabilitas tinggi. Populasi penelitian mencakup seluruh siswa kelas VIII A- VIII K di salah satu sekolah di Kota Bandung. Sampel penelitian terdiri atas kelas VIII E sebagai kelas eksperimen dan kelas VIII A sebagai kelas kontrol. Teknik pengumpulan data melalui tes kemampuan penalaran matematis, lembar observasi keterlaksanaan aktivitas guru dan siswa, lembar angket *curiosity* serta dokumentasi. Hasil dari penelitian ini yaitu: (a) Keterlaksanaan proses pembelajaran dikategorikan sangat baik, (b) Peningkatan kemampuan penalaran matematis siswa dengan model PBL lebih baik dibandingkan siswa dengan pembelajaran konvensional, (c) *Curiosity* siswa menunjukkan kategori respon positif.

Kata kunci: *Curiosity,* Kemampuan Penalaran Matematis, *Problem Based Learnin*g.

ABSTRACT

Devi Fitri Rahmawati, 1212050043, 2025, *"Application of Problem-Based Learning Models to Improve Students' Mathematical Reasoning Ability and Curiosity"*

This study was motivated by the need to improve students' mathematical reasoning ability. The Problem-Based Learning (PBL) model is an alternative for improving mathematical reasoning ability and curiosity. The objectives of this study were to determine: (a) the implementation of the learning process, (b) the improvement of students' mathematical reasoning ability using the PBL model, and (c) the curiosity of students using the PBL model. This study used a quasi-experimental method with a non-equivalent control group design, as well as written test instruments with high and very high validity and high reliability. The research population included all students in grades VIII A-VIII K at a school in Bandung. The research sample consisted of grade VIII E as the experimental class and grade VIII A as the control class. Data collection techniques included mathematical reasoning ability tests, observation sheets on the implementation of teacher and student activities, curiosity questionnaires, and documentation. The results of this study were: (a) The implementation of the learning process was categorised as very good, (b) The improvement in students' mathematical reasoning ability using the PBL model was better than that of students using conventional learning, (c) Student curiosity showed a positive response category.

Keywords: *Curiosity, Mathematical Reasoning Ability, Problem Based Learning*.