

ABSTRAK

**PENGARUH MODEL *DISCOVERY LEARNING* TERINTEGRASI
STEM TERHADAP KEMAMPUAN BERPIKIR
REFLEKTIF MATEMATIS SISWA
(Studi pada Siswa Kelas VIII SMP Negeri 36 Bandar Lampung
Semester Ganjil Tahun Ajaran 2025/2026)**

Oleh

JEREMI SAMUEL TIGOR SIMBOLON

Kesenjangan antara pentingnya memiliki kemampuan berpikir reflektif dan kenyataan bahwa kemampuan tersebut masih tergolong rendah pada siswa di Indonesia telah menjadi alasan utama dilaksanakannya penelitian ini. Model *Discovery Learning* terintegrasi STEM dipandang sebagai salah satu solusi pembelajaran yang relevan dalam mengatasi permasalahan tersebut pada era *Society 5.0* serta sebagai sarana penguatan kompetensi 6C. Penelitian ini bertujuan untuk mengetahui pengaruh model *Discovery Learning* terintegrasi STEM terhadap kemampuan berpikir reflektif matematis siswa. Penelitian ini menggunakan metode kuantitatif dengan pendekatan kuasi eksperimen dan desain *pretest-posttest control group design*. Populasi penelitian mencakup 241 siswa kelas VIII SMPN 36 Bandar Lampung yang terdistribusi dalam delapan kelas. Sampel penelitian diperoleh melalui teknik *purposive sampling*, yaitu siswa kelas VIII C dan VIII E sebanyak 29 siswa untuk masing-masing kelasnya. Berdasarkan analisis statistik inferensial menggunakan *Independent Samples t-test*, diperoleh kesimpulan bahwa peningkatan kemampuan berpikir reflektif matematis siswa yang mengikuti pembelajaran dengan model *Discovery Learning* terintegrasi STEM lebih tinggi dibandingkan siswa yang mengikuti pembelajaran konvensional. Dengan demikian, model *Discovery Learning* terintegrasi STEM berpengaruh terhadap kemampuan berpikir reflektif matematis siswa.

Kata kunci: *Discovery Learning*, kemampuan berpikir reflektif, pengaruh, STEM.

ABSTRACT

THE EFFECT OF STEM-INTEGRATED DISCOVERY LEARNING MODEL ON STUDENTS' MATHEMATICAL REFLECTIVE THINKING SKILLS

**(A Study on Eight-Grade Students of SMP Negeri 36
Bandar Lampung in The Odd 2025/2026 Academic Year)**

By

JEREMI SAMUEL TIGOR SIMBOLON

The discrepancy between the recognized importance of reflective thinking skills and the reality that these skills remain relatively low among Indonesian students forms the primary rationale for this study. The STEM-integrated Discovery Learning model is regarded as a relevant instructional approach to address this issue in the era of Society 5.0, while also serving as a means to strengthen 6C competencies. This study aims to examine the effect of the STEM-Integrated Discovery Learning model on students' mathematical reflective thinking skills. A quantitative method with a quasi-experimental approach and a pretest-posttest control group design was employed. The population consisted of 241 eight-grade students at SMPN 36 Bandar Lampung distributed across eight classes. The sample was selected through purposive sampling, yielding classes VIII C and VIII E, each comprising 29 students. Inferential analysis using the Independent Sample t-test indicated that students taught using the STEM-integrated Discovery Learning model experienced greater improvement in mathematical reflective thinking skills compared to those taught through conventional instruction. These findings demonstrate that the STEM-integrated Discovery Learning model has a significant positive effect on students' mathematical reflective thinking skills.

Key words: Discovery learning, effect, reflective thinking skills, STEM.