ABSTRAK

Josua Simanjuntak, NIM 4162311003 (2023) Efektivitas Pelaksanaan Model Pembelajaran *Problem Based Learning* Terhadap Kemampuan Matematis Siswa Materi Lingkaran Di Kelas VIII SMP Negeri 1 Hamparan Perak. Skripsi Pendidikan Matematika.

Tujuan penelitian ini adalah Untuk Mengetahui Efektivitas Pelaksanaan Model Pembelajaran *Problem based learning* Terhadap Kemampuan Matematis Siswa Materi Lingkaran Di Kelas VIII SMP Negeri 1 Hamparan Perak. Pelaksanaan penelitian ini akan dilakukan di SMP Negeri 1 Hamparan Perak yang beralamat di Jl. Besar Hamparan Perak, Klumpang Kb., Kec. Hamparan Perak, Kabupaten Deli Serdang, Sumatera Utara 20374. Waktu penelitian akan dilakukan pada bulan Maret 2023 sampa dengan Mei 2023 s/d Juni 2023. Pendekatan penelitian yang digunakan dalam penelitian ini adalah penelitian kuantitatif dengan metode eksperimen semu. Sampel penelitian yaitu kelas VIII-1 berjumlah 30 orang (kelas eksperimen) dan VIII-5 berjumlah 31 orang (kelas kontrol). Teknik pengumpulan data dengan soal uraian. Teknik analisis data dengan uji t. Hasil penelitian yaitu diperoleh nilai rata-rata *posttest* kelas eksperimen adalah 80,83 dan posttest kelas kontrol adalah 69,67, artinya terdapat perbedaan kemampuan pemecahan masalah dan kelas eksperimen dengan model PBL lebih baik dibandingkan kelas kontrol dengan model konvensional. Hasil perhitungan diperoleh bahwa thitung sebesar 6,52 dan ttabel sebesar 1,67 pada taraf signifikan 95% atau $\alpha = 0,05$. Karena thitung > ttabel (6,52 > 1,67), maka hipotesis alternatif penelitian (H_0) ditolak yang berarti hipotesis terjawab. Rata-rata Kemampuan pemecahan Masalah Matematis Siswa yang diajarkan dengan Model *Problem Based Learning* Lebih Besar daripada Model Pembelajaran Konvensional pada Materi Lingkaran Kelas VIII SMP Negeri 1 Hamparan Perak . Hasil uji keefektifan diperoleh bahwa n-Gain yang diperoleh sebesar 0.40949735 yang termasuk kategori sedang. Dengan kategori tafsiran efektivitas n-Gain yaitu Kurang efektif

Kata Kunci : *Problem based learning,* Pemecahan Masalah, Matematika.

ABSTRACT

Josua Simanjuntak, NIM 4162311003 (2023) The Effectiveness of the Implementation the *Problem based Learning* Model on Student's Mathematical Problem Solving Ability Class VIII SMP Negeri 1 Hamparan Perak.Thesis Mathematic Education

The aim of this research is to determine the effectiveness of the implementation of the problem based learning model on students' mathematical problem solving abilities on circle material in class VIII SMP Negeri 1 Hamparan Perak. The implementation of this research will be carried out at SMP Negeri 1 Hamparan Perak which is located at Jl. Besar Hampan Perak, Klumpang Kb., Kec. Hamparan Perak, Deli Serdang Regency, North Sumatra 20374. The research was conducted from March 2023 to May 2023 till June 2023. The research approach used in this research was quantitative research with quasi-experimental methods. The research sample was class VIII-1 with 30 people (experimental class) and VIII-5 with 31 people (control class). Data collection techniques using description questions. Data analysis technique using t test. The results of the research were that the average posttest score for the experimental class was 80.83 and the posttest for the control class was 69.67, meaning that there were differences in problem solving abilities and the experimental class with the PBL model was better than the control class with the conventional model. The calculation results show that tcount is 6.52 and ttable is 1.67 at the 95% significance level or $\alpha = 0.05$. Because tcount > ttable (6.52 > 1.67), the research alternative hypothesis (H0) is rejected, which means the hypothesis is answered. The average mathematical problem solving ability of students taught using the problem based learning model is greater than the conventional learning model in Class VIII Circle Material at SMP Negeri 1 Hamparan Perak. The effectiveness test results show that the n-Gain obtained is 0.40949735 which is included in the medium category. The interpretation category for n-Gain's effectiveness is less effective.

Keywords: Problem based learning, problem solving, Mathematic.