ABSTRAK

Eka, NIM.4183151812. Penggunaan Model *Problem Based Learning (PBL)* Berbantuan *Mind Mapping* Terhadap Hasil Belajar Siswa Materi Tekanan Zat Di Smp Negeri 17 Medan.

Penelitian ini bertujuan untuk mengetahui ada tidaknya perbedaan pengetahuan prosedural siswa dan mengetahui efektivitas pembelajaran menggunakan model *problem based learning* berbantuan *mind mapping* dalam meningkatkan hasil belajar siswa. Penelitian dilakukan di SMP Negeri 17 Medan dengan populasi seluruh siswa kelas VIII. Pengambilan sampel dilakukan dengan teknik random sampling, maka kelas yang terpilih adalah kelas VIII-5 dan VIII-6 dengan total sebanyak 64 siswa. Jenis penelitian yang digunakan adalah *Quasi Experiment* dengan desain *two group Pretest-Posttest*. Metode pengumpulan data yang digunakan adalah dengan instrumen tes pilihan berganda yang berjumlah 20 soal. Hasil penelitian menunjukkan bahwa nilai rata-rata pretes bagi kelas eksperimen 36,87 dan kelas kontrol 36,25 serta rata-rata posttes kelas eksperimen 76,71 dan kelas kontrol 60,46 yang menunjukkan bahwa ada perbedaan pengetahuan prosedural antara siswa yang diajarkan dengan model *problem based learning* berbantuan *mind mapping* dan siswa yang diajarkan dengan pembelajaran konvensional. Adapun besar peningkatan hasil belajar kelas eksperimen adalah sebesar 63% dan peningkatan di kelas kontrol adalah 37% yang menunjukkan keduanya sampel memiliki N-Gain yang berada pada kategori sedang dan disimpulkan model *problem based learning* berbantuan *mind mapping* efektif diterapkan dalam pembelajaran IPA.

Kata kunci: *Problem Based Learning*, *Mind Mapping*, Hasil Belajar, Tekanan Zat

ABSTRACT

Eka, NIM.4183151812. The Use of a *Mind Mapping*-Assisted *Problem Based Learning (PBL)* Model on Student Learning Outcomes on Substance Pressure Materials at SMP Negeri 17 Medan.

This study aims to determine whether there are differences in students' procedural knowledge and to determine the effectiveness of learning using a problem based learning model assisted by *mind mapping* in improving student learning outcomes. The study was conducted at 17 Medan State Junior High School with a population of all eighth grade students. Sampling was done by random sampling technique, so the selected classes were class VIII-5 and VIII-6 with a total of 64 students. The type of research used was the Quasi Experiment with a two group pretest-posttest design. The data collection method used is a multiple choice test instrument which consists of 20 questions. The results showed that the average pretest score for the experimental class was 36.87 and the control class was 36.25 and the post-test average for the experimental class was 76.71 and the control class was 60.46 which showed that there was a difference in procedural knowledge between students who were taught using the model. problem based learning assisted by *mind mapping* and students taught by conventional learning. The increase in learning outcomes in the experimental class is 63% and the increase in the control class is 37% which shows that both samples have N-Gain which is in the medium category and it was concluded that the problem based learning model assisted by *mind mapping* is effectively applied in science learning.

Keywords: *Problem Based Learning, Mind Mapping*, Learning Outcomes, Substance Pressure