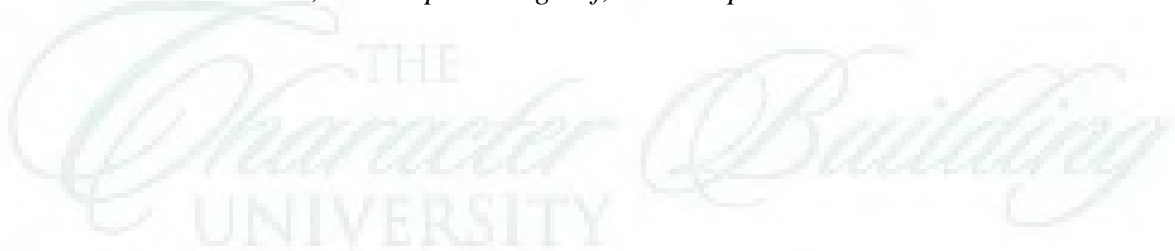# ABSTRAK

Melina Angelita Stevani, NIM 4193151026 (2023). Pengaruh *Problem Based Learning* Terhadap Kemampuan Kognitif Dan Keterampilan Proses Sains Materi Sistem Peredaran Darah Kelas VIII SMP Negeri 1 Pancur Batu T.P 2022/2023.

Penelitian ini bertujuan untuk mengetahui pengaruh penerapan model pembelajaran *Problem Based Learning* terhadap kemampuan kognitif dan keterampilan proses sains materi sistem peredaran darah pada kelas VIII SMP Negeri 1 Pancur Batu Tahun Pelajaran 2022/2023. Penelitian menggunakan quasi eksperimen dengan desain *Pretest and Posttest Control Group Design*. Sampel terdiri dari dua kelas yaitu kelas VIII-4 (Kelas Eksperimen) dengan model pembelajaran PBL dan kelas VIII-7 (Kelas Kontrol) tanpa model pembelajaran PBL. Pengambilan sampel dilakukan dengan teknik *Simple Random Sampling*. Pengumpulan data dilakukan dengan menggunakan tes dan observasi. Data dianalisis dengan menguji hipotesis menggunakan *Independent Sample t-test*. Data rata-rata *pretest* dan *posttest* kemampuan kognitif pada kelas eksperimen masing masing adalah 40,2 dan 82,7 dan pada kelas kontrol 38,2 dan 74,1. Berdasarkan uji hipotesis diperoleh bahwa terdapat pengaruh penerapan model pembelajaran PBL terhadap kemampuan kognitif materi sistem peredaran darah kelas VIII di SMP Negeri 1 Pancur Batu Tahun Pelajaran 2022/2023. Data rata-rata persentase akhir keterampilan proses sains kelas eksperimen dan kelas kontrol masing-masing adalah 79,94% dan 69,56%. Berdasarkan uji hipotesis diperoleh bahwa terdapat pengaruh penerapan model pembelajaran PBL terhadap keterampilan proses sains materi sistem peredaran darah kelas VIII di SMP Negeri 1 Pancur Batu Tahun Pelajaran 2022/2023. Dapat disimpulkan bahwa terdapat pengaruh penerapan model pembelajaran *Problem Based Learning* terhadap kemampuan kognitif dan keterampilan proses sains pada materi sistem peredaran darah kognitif kelas VIII SMP Negeri 1 Pancur Batu T.P 2022/2023.

Kata Kunci: *PBL, Kemampuan Kognitif, Keterampilan Proses Sains*

ABSTRACT

Melina Angelita Stevani, NIM 4193151026 (2023). The Influence Problem Based Learning on Cognitive Ability and Science Process Skills on Circulatory System Material for Grade VIII SMP Negeri 1 Pancur Batu Academic Year 2022/2023.

This study aims to determine the effect of using the Problem Based Learning learning model on cognitive abilities and science process skills on the circulatory system material in class VIII SMP Negeri 1 Pancur Batu Academic Year 2022/2023. Research uses a quasi-experimental design with a Pretest and Posttest Control Group Design. The sample consisted of two classes, namely class VIII-4 (Experimental Class) with the PBL learning model and class VIII-7 (Control Class) without the PBL learning model. Sampling was done by Simple Random Sampling. Data collection was carried out using tests and observations. Data were analyzed by testing the hypothesis using the Independent Sample t-test. The average pretest and posttest cognitive abilities in the experimental class were 40.2 and 82.7 respectively and in the control class 38.2 and 74.1 respectively. Based on the hypothesis test, it was found that there was an effect of applying the PBL learning model on cognitive abilities in class VIII circulatory system material at SMP Negeri 1 Pancur Batu in the Academic Year 2022/2023. Data on the final average percentage of science process skills in the experimental class and the control class were 79.94% and 69.56%, respectively. Based on the hypothesis test, it was found that there was an effect of the application of the PBL learning model on the science process skills for class VIII circulatory system material at SMP Negeri 1 Pancur Batu Academic Year 2022/2023. It can be concluded that there is an effect of applying the Problem Based Learning learning model on cognitive abilities and science process skills in cognitive circulatory system material for class VIII SMP Negeri 1 Pancur Batu Academic Year 2022/2023.

Keywords: PBL, Cognitive Ability, Science Process Skills