ABSTRAK

Atania Rosbina Br Depari, NPM: 2015010091. Pengaruh Model *Problem Based Learning* (PBL) Terhadap Kemampuan Pemecahan Masalah Materi Kalor Kelas V SDN 040444 Kabanjahe Tahun Ajaran 2023/2024.

Hasil observasi di Kelas V SDN 040444 Kabanjahe diperoleh informasi bahwa proses pembelajaran IPA kurang mengembangkan kemampuan pemecahan masalah dan kurang bisa meningkatkan sikap ilmiah siswa. Berdasarkan informasi tersebut, maka diperlukan adanya model pembelajaran yang dapat menumbuhkan kemampuan pemecahan masalah. Salah satu model yang dapat digunakan yaitu *Problem Based Learning*. Penelitian ini dilakukan di Kelas V SDN 040444 Kabanjahe bertujuan untuk mengetahui pengaruh *Problem Based Learning* terhadap kemampuan pemecahan masalah materi kalor kelas V. Desain penelitian ini adalah quasi-experimental design dengan bentuk nonequivalent control group design. Sampel dalam penelitian ini adalah siswa kelas V.A (kelas Kontrol) dan V.B (kelas Eksperimen) diambil dengan teknik purposive sampling. Metode pengumpulan data yang digunakan adalah metode observasi dan metode tes. Dari hasil penelitian diperoleh nilai rata – rata pretes kelas eksperimen 47 dengan standar deviasi 20,79 dan pada kelas kontrol sebesar 30 dengan standar deviasi 10,21. Setelah dilakukan uji normalitas dan uji homogenitas, data nilai pretes dari kelas eksperimen dan kontrol dinyatakan berdistribusi normal dan homogen. Melalui pengujian statistik diperoleh hasil yang signifikan bahwa kemampuan awal kedua kelas adalah setara. Kemudian diberikan perlakuan pada kelas eksperimen dengan model *problem based learning* sedangkan kelas kontrol diajarkan menggunakan pembelajaran konvensional. Setelah pembelajaran selesai, diberikan postes dan diperoleh nilai rata –rata kelas eksperimen 98 dengan standar deviasi 6,15, dan kelas kontrol 58,33 dengan standar deviasi 20,35. Melalui pengujian statistik menggunakan uji-t satu pihak dapat disimpulkan bahwa ada pengaruh yang signifikan model *Problem Based Learning* terhadap kemampuan pemecahan masalah materi kalor kelas V SDN 040444 Kabanjahe Tahun Ajaran 2023/2024.

Kata Kunci : Model *Problem Based Leaning*, Kemampuan Pemecahan Masalah Materi Kalor

ABSTRAK

Atania Rosbina Br Depari, NPM: 2015010091. The Effect of the *Based Learning* (PBL) Problem Model on the Problem Solving Ability of Class V Heat Material at SDN 040444 Kabanjahe for the 2023/2024 Academic Year.

The results of observations in Class V of SDN 040444 Kabanjahe obtained information that the science learning process did not develop problem-solving skills and could not improve students' scientific attitudes. Based on this information, it is necessary to have a learning model that can foster students' problem-solving abilities and scientific attitudes. One model that can be used is Problem Based Learning. This research was conducted in Class V of SDN 040444 Kabanjahe aimed to determine the effect of Problem Based Learning on the problem-solving ability of class V heat material. This research design is a quasi-experimental design with a form of nonequivalent control group design. The samples in this study were students of class V.A (Control class) and V.B (Experiment class) taken by purposive sampling technique. The data collection methods used are observation method and test method. From the results of the study, the average test value of the experimental class was 47 with a standard deviation of 20.79 and in the control class of 30 with a standard deviation of 10.21. After the normality test and homogeneity test, the pretest value data from the experimental and control classes were declared to be normally distributed and homogeneous. Through statistical testing, significant results were obtained that the initial abilities of both classes were equal. Then the experimental class was treated with a problem-based learning model while the control class was taught using conventional learning. After the learning was completed, postes were given and obtained an average score of the experimental class 98 with a standard deviation of 6.15, and the control class 58.33 with a standard deviation of 20.35. Through statistical testing using a one-party t-test, it can be concluded that there is a significant influence of the *Problem Based Learning* model on the problem-solving ability of class V heat material at SDN 040444 Kabanjahe for the 2023/2024 academic year.

Keywords: Based Leaning Problem Model, Heat Material Problem Solving Abili