PENGARUH MODEL *PROBLEM BASED LEARNING* (PBL) BERBANTUAN MEDIA *WAYGROUND* TERHADAP KEMAMPUAN PEMAHAMAN KONSEP MATEMATIS MURID SEKOLAH DASAR

Oleh

UKEU NURNAENI

225060162

ABSTRAK

Penelitian ini dilatarbelakangi oleh rendahnya kemampuan pemahaman konsep matematis murid sekolah dasar, khususnya pada materi penyajian data. Penelitian ini bertujuan untuk mendeskripsikan proses pembelajaran, mengetahui peningkatan kemampuan pemahaman konsep matematis, menganalisis pengaruh penerapan model *Problem Based Learning* (PBL) berbantuan media *wayground*, serta mengetahui besar pengaruhnya. Penelitian ini menggunakan pendekatan kuantitatif dengan metode kuasi eksperimen dan desain *pretest-posttest with non-equivalent control group*. Populasi penelitian berjumlah 140 murid kelas III SD Negeri 033 Asmi Bandung. Sampel dipilih menggunakan teknik *purposive sampling*, yaitu kelas III A sebagai kelas eksperimen dan kelas III B sebagai kelas kontrol, masing-masing berjumlah 28 murid. Data dikumpulkan melalui tes, observasi, wawancara, dan dokumentasi. Data *N-Gain* dianalisis melalui uji normalitas, uji homogenitas, uji *Independent Sample T-Test*, dan uji *effect size* dengan bantuan *software* IBM *SPSS Statistics versi* 29.0. Hasil penelitian menunjukkan bahwa rata-rata aktivitas guru dan murid pada kelas eksperimen masing-masing sebesar 87% dan 86%, sedangkan pada kelas kontrol sebesar 82% dan 77%. Rata-rata *N-Gain* kelas eksperimen sebesar 0,65 dan kelas kontrol sebesar 0,50, yang keduanya berada pada kategori sedang. Hasil uji *Independent Sample T-Test* memperoleh nilai *Two-Sided p* sebesar 0,010 < 0,05. Uji *effect size* nilai *Cohen's d* sebesar 0,713 yang termasuk kategori sedang. Oleh karena itu, model *Problem Based Learning* (PBL) berbantuan media *wayground* berpengaruh signifikan terhadap peningkatan kemampuan pemahaman konsep matematis murid sekolah dasar.

Kata Kunci: Kemampuan pemahaman konsep matematis, model *Problem Based Learning* (PBL), media *wayground*, murid sekolah dasar

THE EFFECT OF THE PROBLEM-BASED LEARNING (PBL) MODEL SUPPORTED BY WAYGROUND MEDIA ON THE MATHEMATICAL CONCEPT UNDERSTANDING SKILLS OF ELEMENTARY SCHOOL STUDENTS

By

UKEU NURNAENI

225060162

ABSTRACT

This study was motivated by the low level of elementary school students' mathematical conceptual understanding, particularly in the topic of data presentation. This study aimed to describe the learning process, determine the improvement in students' mathematical conceptual understanding, analyze the effect of the Problem-Based Learning (PBL) model assisted by Wayground media, and measure the magnitude of its effect. This study employed a quantitative approach using a quasi-experimental method with a pretest-posttest non-equivalent control group design. The population consisted of 140 third-grade students at SD Negeri 033 Asmi Bandung. The sample was selected using purposive sampling, with Class III A serving as the experimental group and Class III B as the control group, each consisting of 28 students. Data were collected through tests, observations, interviews, and documentation. The N-Gain data were analyzed using normality and homogeneity tests, an Independent Samples t-Test, and an effect size test with the assistance of IBM SPSS Statistics version 29.0. The results showed that the average teacher and student activity scores in the experimental group were 87% and 86%, respectively, while those in the control group were 82% and 77%, respectively. The average N-Gain score was 0.65 for the experimental group and 0.50 for the control group, both of which were classified as moderate. The Independent Samples t-Test yielded a two-sided p-value of 0.010, which was lower than 0.05. The effect size test yielded a Cohen's d value of 0.713, which was classified as moderate. Therefore, the Problem-Based Learning (PBL) model assisted by Wayground media had a significant effect on improving elementary school students' mathematical conceptual understanding.

***Keywords**: Mathematical concept understanding ability, Problem Based Learning (PBL) model, wayground media, elementary school students*

PANGARUH MODÉL PANGAJARAN PROBLEM BASED LEARNING (PBL) NGAGUNAKEUN MEDIA WAYGROUND KANA KAMAMPUH PAMAHAMAN KONSÉP MATEMATIS MURID SAKOLA DASAR

Ku

UKEU NURNAENI

225060162

RINGKESAN

Panalungtikan ieu dikasangtukangan ku masih handapna kamampuh pamahaman konsép matematis murid sakola dasar, hususna dina matéri penyajian data. Panalungtikan ieu miboga tujuan pikeun ngadéskripsikeun prosés pangajaran, mikanyaho paningkatan kamampuh pamahaman konsép matematis, nganalisis pangaruh penerapan modél Problem Based Learning (PBL) dibantuan ku média wayground, sarta mikanyaho gedéna pangaruh anu dihasilkeun. Panalungtikan ieu ngagunakeun pamarekan kuantitatif kalayan métode kuasi ékspérimén jeung desain pretest-posttest with non-equivalent control group. Populasi panalungtikan jumlahna 140 murid kelas III SD Negeri 033 Asmi Bandung. Sampel dipilih ngagunakeun téhnik purposive sampling, nyaéta kelas III A salaku kelas ékspérimén jeung kelas III B salaku kelas kontrol, anu masing-masing jumlahna 28 murid. Data dikumpulkeun ngaliwatan tés, obsérvasi, wawancara, jeung dokuméntasi. Data N-Gain dianalisis ngagunakeun uji normalitas, uji homogénitas, uji Independent Sample T-Test, jeung uji effect size kalayan bantuan software IBM SPSS Statistics vérsi 29.0. Hasil panalungtikan némbongkeun yén rata-rata aktivitas guru jeung murid di kelas ékspérimén masing-masing nyaéta 87% jeung 86%, sedengkeun di kelas kontrol nyaéta 82% jeung 77%. Rata-rata N-Gain kelas ékspérimén nyaéta 0,65 jeung kelas kontrol nyaéta 0,50, anu duanana kaasup kana katégori sedeng. Hasil uji Independent Sample T-Test ngahasilkeun nilai Two-Sided p sebesar 0,010 < 0,05. Uji effect size ngahasilkeun nilai Cohen's d sebesar 0,713 anu kaasup kana katégori sedeng. Ku kituna, modél Problem Based Learning (PBL) dibantuan ku média Wayground miboga pangaruh anu signifikan kana paningkatan kamampuh pamahaman konsép matematis murid sakola dasar.

***Kecap Pamageuh**: Kamampuh pamahaman konsép matematis, modél Problem Based Learning (PBL), média wayground, murid sakola dasar*