Universitas Ngudi Waluyo Program Studi Pendidikan Guru Sekolah Dasar
Fakultas Komputer dan Pendidikan

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Eggy Kusuma Sari

131221033

Pengaruh Model Pembelajaran *Problem Based Learning*

Berbantuan *Geohouse* Terhadap Kemampuan Koneksi Matematis Siswa Kelas V SD

ABSTRAK

Penelitian ini bertujuan untuk menganalisis perbedaan dan pengaruh penerapan model *Problem Based Learning* (PBL) berbantuan media Geohouse terhadap kemampuan koneksi matematis siswa kelas V pada materi luas bangun datar. Penelitian ini dilatarbelakangi oleh rendahnya kemampuan siswa dalam menghubungkan konsep matematika antar topik, dengan disiplin ilmu lain, serta dengan konteks kehidupan sehari-hari. Penelitian menggunakan pendekatan kuantitatif dengan desain *quasi-experimental* tipe *non-equivalent control group design*. Sampel penelitian terdiri atas kelas VB sebagai kelas eksperimen yang memperoleh pembelajaran PBL berbantuan Geohouse dan kelas VA sebagai kelas kontrol yang memperoleh pembelajaran PBL tanpa media. Instrumen penelitian berupa tes kemampuan koneksi matematis yang telah diuji validitas dan reliabilitasnya. Analisis data dilakukan menggunakan bantuan SPSS melalui uji prasyarat (normalitas dan homogenitas), uji *independent sample t-test*, dan regresi linear sederhana. Hasil analisis menunjukkan nilai signifikansi uji *t* sebesar 0,000 (< 0,05) dengan nilai t_hitung 4,686 > t_tabel 2,010, sehingga terdapat perbedaan yang signifikan antara kedua kelompok. Uji regresi menunjukkan nilai signifikansi 0,000 (< 0,05) dengan koefisien determinasi (R^2) sebesar 0,315, yang mengindikasikan bahwa penggunaan PBL berbantuan Geohouse memberikan kontribusi sebesar 31,5% terhadap peningkatan kemampuan koneksi matematis siswa. Dengan demikian, model PBL berbantuan Geohouse terbukti efektif dalam meningkatkan kemampuan koneksi matematis siswa sekolah dasar.

Kata kunci: Problem Based Learning, Geohouse, kemampuan koneksi matematis, quasi-experimental design.

Universitas Ngudi Waluyo

Study Program of Primary School Teachers Education, Faculty of Computer and Education

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Eggy Kusuma Sari

131221033

The Influence of Geohouse Assisted ProblemBased Learning Model on the Mathematical Connection Ability of Fifth Grade Elementary School Students

ABSTRACT

This study aims to analyze the differences and the effect of implementing the Problem-Based Learning (PBL) model assisted by Geohouse media on fifth-grade students' mathematical connection ability in the topic of area of plane figures. The study was motivated by students' low ability to connect mathematical concepts across topics, with other disciplines, and with real-life contexts. This research employed a quantitative approach with a quasi-experimental design using a non-equivalent control group design. The sample consisted of class VB as the experimental group receiving PBL assisted by Geohouse media and class VA as the control group receiving PBL without media assistance. The research instrument was a validated and reliable mathematical connection ability test. Data were analyzed using SPSS through prerequisite tests (normality and homogeneity), independent sample t-test, and simple linear regression analysis. The results revealed a significance value of 0.000 (< 0.05) in the t-test, with t_count 4.686 > t_table 2.010, indicating a significant difference between the two groups. The regression analysis showed a significance value of 0.000 (< 0.05) with a coefficient of determination (R^2) of 0.315, indicating that the implementation of PBL assisted by Geohouse contributed 31.5% to the improvement of students' mathematical connection ability. Therefore, the PBL model assisted by Geohouse is proven to be effective in enhancing elementary students' mathematical connection ability.

Keywords: Problem Based Learning, Geohouse, Mathematical Connection Ability, Mathematics Learning