

ABSTRAK

Gianita Sella Wisuda. 2024. *Pengaruh Model Problem Based Learning Berbantuan Modul Digital Etnomatematika Terhadap Kemampuan Kognitif Siswa Kelas IV Sekolah Dasar*. Skripsi. Pendidikan Guru Sekolah Dasar, Fakultas Keguruan dan Ilmu Pendidikan, Universitas PGRI Madiun. Pembimbing (I) Dr. Hendra Erik Rudyanto, S.Pd., M.Pd., (II) Fida Rahmantika Hadi, M.Pd.

Kemampuan kognitif sangat penting bagi siswa untuk mengasah pola pikir individu yang mencakup pemahaman, penalaran, dan pengetahuan yang bermakna dengan kata-kata yang kompleks untuk menalar serta memecahkan masalah matematika dalam dunia nyata dengan mencari solusi terbaik. Pengintegrasian kemampuan kognitif membutuhkan suatu model pembelajaran yang berbasis masalah, seperti model *Problem Based Learning* dan ditunjang dengan media pembelajaran. Penelitian ini bertujuan untuk mengetahui apakah model *Problem Based Learning* berbantuan media modul digital etnomatematika terdapat pengaruh yang signifikan dari pada menggunakan model *Problem Based Learning* berbantuan buku cetak ditinjau dari kemampuan kognitif siswa kelas IV sekolah dasar. Subjek dalam penelitian ini adalah siswa kelas IV A dan IV B SDN 01 Nambangan Lor Kota Madiun. Jenis pendekatan penelitian adalah kuantitatif dengan jenis penelitian *Quasy Experimental* yang menggunakan desain *Pretest* dan *Posttes*, teknik pengumpulan data menggunakan test. Teknik pengambilan sampel menggunakan teknik *Simple Random Sampling*, sampel pada penelitian ini sebanyak 52 siswa yang terdiri dari 26 siswa kelas IV A sebagai kelas eksperimen dan 26 siswa kelas IV B sebagai kelas kontrol. Hasil analisis data menunjukkan perbedaan kemampuan kognitif yang signifikan antara kemampuan kognitif siswa yang menggunakan pembelajaran model *Problem Based Learning* berbantuan media modul digital etnomatematika dan pembelajaran yang menggunakan model *Problem Based Learning* berbantuan buku siswa. Jadi hasil keputusan penelitian menunjukkan model *Problem Based Learning* berbantuan media modul digital etnomatematika terdapat pengaruh yang signifikan dari pada menggunakan model *Problem Based Learning* berbantuan buku cetak ditinjau dari kemampuan kognitif.

Kata kunci: *Problem Based Learning*, Modul Digital Etnomatematika, Kemampuan Kognitif

ABSTRACT

Gianita Sella Wisuda. 2024. The Effect of the Problem Based Learning Model Assisted by Digital Ethnomathematics Modules on the Cognitive Abilities of Grade IV Elementary School Students. Thesis. Primary School Teacher Education, Faculty of Teacher Training and Education, UNIVERSITAS PGRI MADIUN. Advisor: Dr. Hendra Erik Rudyanto, S.Pd., M.Pd., Co Advisor: Fida Rahmantika Hadi, M.Pd.

Key Terms: Problem Based Learning, Digital Ethnomathematics Module, Cognitive Ability

Cognitive abilities are very important for students to hone individual thought patterns which include understanding, reasoning, and meaningful knowledge with complex words to reason and solve mathematical problems in the real world by finding the best solution. Integrating cognitive abilities requires a problem-based learning model, such as the Problem Based Learning model and supported by learning media. This research aims to find out whether the Problem Based Learning model using digital ethnomathematics media modules has a significant effect compared to using the Problem Based Learning model assisted by printed books in terms of the cognitive abilities of fourth grade elementary school students. The subjects in this research were students of class IV A and IV B at SDN 01 Nambangan Lor, Madiun City. The type of research approach is quantitative with a Quasy Experimental research type that uses a Pretest and Posttest design, data collection techniques using tests. The sampling technique used Simple Random Sampling technique, the sample in this study was 52 students consisting of 26 class IV A students as the experimental class and 26 class IV B students as the control class. The results of data analysis show significant differences in cognitive abilities between the cognitive abilities of students who use the Problem Based Learning model assisted by digital ethnomathematics media modules and those who use the Problem Based Learning model assisted by student books. So the results of the research decision show that the Problem Based Learning model assisted by digital ethnomathematics media modules has a significant influence compared to using the Problem Based Learning model assisted by printed books in terms of cognitive abilities.