

ABSTRAK

Dewi Kartika Putri. 2025. Efektivitas Pendekatan Matematika Realistik Indonesia (PMRI) Berbantuan Media *Magic Straw* Terhadap Kemampuan Koneksi Matematis Siswa Kelas V SD. Skripsi. Pendidikan Guru Sekolah Dasar, Fakultas Keguruan dan Ilmu Pendidikan, Universitas PGRI Madiun. Pembimbing (I) Dr. Fauzatul Ma'rufah R.,M.Pd., (II) Melik Budiarti.,S.Sos., MA.

Penelitian ini bertujuan menguji efektivitas pendekatan Pendidikan Matematika Realistik Indonesia (PMRI) berbantuan media *magic straw* terhadap kemampuan koneksi matematis siswa kelas V sekolah dasar pada materi bangun datar. Penelitian menggunakan pendekatan kuantitatif dengan metode *true experiment* melalui desain *post-test only control group*. Sampel terdiri atas kelas eksperimen yang memperoleh pembelajaran dengan pendekatan PMRI berbantuan media *magic straw* dan kelas kontrol yang memperoleh pembelajaran dengan pendekatan ekspositori berbantuan media gambar, masing-masing berjumlah 17 dan 15 siswa yang dipilih melalui teknik *simple random sampling*. Data dikumpulkan melalui tes kemampuan koneksi matematis dan lembar observasi, kemudian dianalisis menggunakan uji normalitas, uji homogenitas, dan *independent sample t-test* dengan bantuan SPSS versi 25. Hasil *independent sample t-test* menunjukkan terdapat perbedaan signifikan kemampuan koneksi matematis antara kelas eksperimen dan kelas kontrol, dengan nilai signifikansi sebesar $0,000 < 0,05$. Rata-rata nilai *post-test* kelas eksperimen sebesar 84,52, lebih tinggi dibandingkan kelas kontrol sebesar 71,80. Hasil observasi juga menunjukkan rata-rata skor kelas eksperimen sebesar 33,35, lebih tinggi dibandingkan kelas kontrol sebesar 27,53, dengan nilai signifikansi yang sama yaitu $0,000 < 0,05$. Dengan demikian, pendekatan PMRI berbantuan media *magic straw* efektif meningkatkan kemampuan koneksi matematis siswa sekolah dasar pada materi bangun datar.

Kata kunci: bangun datar, kemampuan koneksi matematis, *magic straw*, pendidikan matematika realistik indonesia

ABSTRACT

Dewi Kartika Putri. 2025. *The Effectiveness of the Indonesian Realistic Mathematics Education (PMRI) Approach Assisted by Magic Straw Media on the Mathematical Connection Skills of Fifth-Grade Elementary School Students. Undergraduate Thesis. Primary School Teacher Education, Faculty of Teacher Training and Education, Universitas PGRI Madiun. Supervisors: (I) Dr. Fauzatul Ma'rufah R., M.Pd., (II) Melik Budiarti, S.Sos., MA.*

This study aimed to examine the effectiveness of the Indonesian Realistic Mathematics Education (PMRI) approach assisted by magic straw media on the mathematical connection ability of fifth-grade elementary students in the topic of two-dimensional shapes. The study used a quantitative approach with a true experimental method through a post-test only control group design. The sample consisted of an experimental class that received PMRI learning assisted by magic straw media and a control class that received expository learning assisted by picture media, totaling 17 and 15 students respectively, selected through simple random sampling. Data were collected through a mathematical connection ability test and an observation sheet, then analyzed using normality tests, homogeneity tests, and an independent sample t-test with the help of SPSS version 25. The independent sample t-test results showed a significant difference in mathematical connection ability between the experimental and control classes, with a significance value of $0.000 < 0.05$. The experimental class's post-test average was 84.52, higher than the control class's 71.80. Observation results also showed that the experimental class's average score was 33.35, higher than the control class's 27.53, with the same significance value of $0.000 < 0.05$. Thus, the PMRI approach assisted by magic straw media is effective in improving the mathematical connection ability of elementary students in the topic of two-dimensional shape.

Keywords: magic straw, mathematical connection ability, realistic mathematics education, two-dimensional shapes