

**PENGEMBANGAN *FRAMEWORK* GEOMETRI BERBASIS  
ETNOMATEMATIKA UNTUK MENINGKATKAN KEMAMPUAN  
METAKOGNITIF DAN PEMAHAMAN MATEMATIS SISWA KELAS V  
SEKOLAH DASAR**

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**Abstrak**

Penelitian ini bertujuan untuk mengembangkan media *framework geometri berbasis etnomatematika* untuk meningkatkan kemampuan metakognitif dan pemahaman matematis siswa pada muatan Matematika kelas V SD yang valid, praktis dan efektif. Penelitian yang dilakukan adalah penelitian pengembangan (*Research & Development*) dan menggunakan model pengembangan ADDIE. Metode dari pengumpulan data menggunakan instrument kuisisioner dan tes uraian. Data dari validitas media bersumber dari ahli materi Matematika dan ahli media pembelajaran. Data dari kepraktisan media bersumber pada 9 orang siswa kelas V SD. Pengujian untuk mengukur efektivitas produk dilakukan dengan menggunakan desain *one group pretest posttest* pada jumlah sampel sebanyak 32 orang siswa kelas V SD. Hasil dari data dianalisis secara kualitatif dan kuantitatif. Hasil dari penelitian media *framework geometri berbasis etnomatematika* untuk meningkatkan kemampuan metakognitif dan pemahaman matematis siswa kelas V SD dinyatakan (1) valid ditinjau pada aspek isi, materi, dan media pembelajaran Matematika; (2) praktis ditinjau dari perspektif siswa; (3) efektif untuk meningkatkan kemampuan metakognitif dan pemahaman siswa kelas V SD pada materi Matematika. Berdasarkan hasil tersebut dapat disimpulkan bahwa media pembelajaran *framework geometri berbasis etnomatematika* yang telah dikembangkan, dinyatakan valid, praktis, dan efektif dalam meningkatkan kemampuan metakognitif dan pemahaman matematis siswa kelas V SD, sehingga layak digunakan secara berkelanjutan pada kegiatan pembelajaran.

Kata kunci: geometri, etnomatematika, metakognitif, pemahaman matematis, sekolah dasar

**DEVELOPMENT OF GEOMETRY FRAMEWORK BASED ON  
ETHNOMATHEMATICS TO IMPROVE METACOGNITIVE ABILITY AND  
MATHEMATICAL UNDERSTANDING OF GRADE V ELEMENTARY  
SCHOOL STUDENTS**

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**Abstract**

*This study aims to develop a geometry framework media based on ethnomathematics to improve metacognitive ability and mathematical understanding of students in Mathematics content of grade V elementary school that is valid, practical and effective. The research conducted is a development research (Research & Development) and uses the ADDIE development model. The method of data collection uses questionnaire instruments and essay tests. Data from the validity of the media comes from Mathematics material experts and learning media experts. Data from the practicality of the media comes from 9 grade V elementary school students. Testing to measure the effectiveness of the product is carried out using a one group pretest posttest design on a sample of 32 grade V elementary school students. The results of the data were analyzed qualitatively and quantitatively. The results of the research on ethnomathematics-based geometry framework media to improve metacognitive abilities and mathematical understanding of fifth grade elementary school students were stated as (1) valid in terms of content, material, and Mathematics learning media; (2) practical in terms of students' perspectives; (3) effective in improving metacognitive abilities and understanding of fifth grade elementary school students in Mathematics material. Based on these results, it can be concluded that the ethnomathematics-based geometry framework learning media that has been developed is stated as valid, practical, and effective in improving metacognitive abilities and mathematical understanding of fifth grade elementary school students, so it is worthy of being used continuously in learning activities.*

*Keywords: geometry, ethnomathematics, metacognitive, mathematical understanding, elementary school*