

ABSTRAK

Nabila Nurlatifah Fitriani Ryanto (2026), Pengembangan GEOMATNO (Media Pembelajaran Geometri dengan Etnomatematika) Berbasis Google Sites pada Materi Transformasi Geometri Siswa SMP

Pembelajaran transformasi geometri masih menghadapi kendala karena materi bersifat abstrak dan membutuhkan kemampuan visualisasi yang baik. Selain itu, penggunaan media pembelajaran yang kurang interaktif dan kurang mengaitkan konsep matematika dengan konteks budaya menyebabkan peserta didik mengalami kesulitan dalam memahami konsep transformasi geometri. Oleh karena itu, tujuan penelitian ini yaitu mengembangkan media pembelajaran GEOMATNO (Media Pembelajaran Geometri dengan Etnomatematika) berbasis Google Sites pada materi transformasi geometri siswa SMP serta mengetahui tingkat validitas, kepraktisan, dan keefektifannya. Metode yang digunakan pada penelitian ini adalah Research and Development (R&D) dengan model pengembangan ADDIE (Analysis, Design, Development, Implementation, and Evaluation). Media GEOMATNO dikembangkan dengan mengintegrasikan materi transformasi geometri yang meliputi translasi, refleksi, rotasi, dan dilatasi dengan unsur etnomatematika berbasis Masjid Besar Cipaganti. Hasil validasi media memperoleh persentase sebesar 89% dengan kategori sangat baik, validasi materi sebesar 79% dengan kategori baik, dan validasi budaya sebesar 100% dengan kategori sangat baik. Hasil uji praktikalitas pada skala kecil memperoleh persentase sebesar 88% dengan kategori sangat praktis, sedangkan pada skala besar memperoleh persentase sebesar 91% dengan kategori sangat praktis. Hasil uji efektivitas menunjukkan bahwa sebanyak 24 dari 31 peserta didik atau sebesar 77,42% memperoleh nilai ≥ 75 , sehingga media pembelajaran GEOMATNO dinyatakan efektif karena telah memenuhi kriteria minimal 75% peserta didik mencapai KKM. Dapat disimpulkan bahwa media pembelajaran GEOMATNO berbasis Google Sites pada materi transformasi geometri memenuhi kriteria valid, sangat praktis, dan efektif sehingga layak digunakan dalam pembelajaran matematika siswa SMP.

Kata Kunci: Etnomatematika, GEOMATNO, Google Sites, Media Pembelajaran, Transformasi Geometri

ABSTRACT

Nabila Nurlatifah Fitriani Ryanto (2026), Development of GEOMATNO (Geometry Learning Media with Ethnomathematics) Based on Google Sites on the Topic of Geometric Transformations for Junior High School Students

Learning geometric transformations still faces challenges because the material is abstract and requires good visualization skills. In addition, the use of learning media that is less interactive and does not sufficiently relate mathematical concepts to cultural contexts can make it difficult for students to understand geometric transformation concepts. Therefore, this study aimed to develop GEOMATNO (Geometry Learning Media with Ethnomathematics) based on Google Sites on the topic of geometric transformations for junior high school students and to determine its validity, practicality, and effectiveness. The method used in this study was Research and Development (R&D) with the ADDIE development model, consisting of Analysis, Design, Development, Implementation, and Evaluation. GEOMATNO was developed by integrating geometric transformation materials, including translation, reflection, rotation, and dilation, with ethnomathematical elements based on the Great Mosque of Cipaganti. The results of media validation obtained a percentage of 89% with a very good category, material validation obtained 79% with a good category, and cultural validation obtained 100% with a very good category. The practicality test results obtained a percentage of 88% with a very practical category in the small-scale trial, while the large-scale trial obtained 91% with a very practical category. The effectiveness test showed that 24 out of 31 students, or 77.42%, obtained scores of ≥ 75 . Thus, the GEOMATNO learning media was considered effective because it met the minimum criterion of 75% of students achieving the minimum mastery criterion. It can be concluded that GEOMATNO based on Google Sites on the topic of geometric transformations meets the criteria of being valid, very practical, and effective, making it suitable for use in mathematics learning for junior high school students.

Keywords: *Ethnomathematics, GEOMATNO, Geometric Transformations, Google Sites, Learning Media*

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