

ABSTRAK

Sarah Sonia Br.Napitupulu, NIM 4192411028(2025).Pengembangan Media Pembelajaran Matematika Digital Dengan Pendekatan Pendidikan Matematika Realistik Untuk Meningkatkan Kemampuan Pemahaman Konsep Matematis Siswa Di SMP 16 Medan.

Tujuan penelitian ini untuk menghasilkan media pembelajaran matematika digital dengan pendekatan pendidikan matematika realistik yang valid, praktis, dan efektif untuk meningkatkan kemampuan pemahaman konsep matematis. Jenis penelitian yang digunakan ialah Research and Development dengan menggunakan model ADDIE. Berdasarkan hasil penelitian menunjukkan bahwa : (1) Media digital yang telah dikembangkan memenuhi kriteria validitas berdasarkan penilaian validator materi dan media memiliki nilai rata-rata persentase validitas berturut-turut sebesar 88,67% dan 86,13% dengan kategori sangat layak (2) Media digital yang dikembangkan memenuhi kriteria kepraktisan: a) hasil angket guru pada media menunjukkan relevansi praktis sebesar 90,67% dalam kategori praktis; (b) hasil angket siswa pada siswa menunjukkan relevansi praktis sebesar 89,33% dalam kategori praktis; (3) media yang dikembangkan memenuhi kriteria efektif dengan: (a) ketuntasan belajar klasikal siswa sebesar 86,67%; (b) rata-rata ketuntasan belajar individual sebesar 82,8 artinya telah tercapai ketuntasan tujuan pembelajaran; (c) Waktu pembelajaran sama dengan pembelajaran biasa pada uji lapangan dan mendapatkan respon positif dari siswa terhadap media. Uji analisis N-Gain menunjukkan bahwa kemampuan pemahaman konsep matematis siswa yang menggunakan media digital rata-rata nilai N-gain siswa sebesar 0,68 artinya berada pada kategori sedang

Kata kunci: Kemampuan Pemahaman Konsep, Media Digital, Pendidikan Matematika Realistik

ABSTRACT

Sarah Sonia Br Napitupulu, NIM 4192411028 (2025). Development of Digital Mathematics Learning Media with a Realistic Mathematics Education Approach to Improve Students' Mathematical Concept Understanding Ability at SMP 16 Medan.

The aim of this research is to produce digital mathematics learning media with a realistic mathematics education approach that is valid, practical and effective for improving the ability to understand mathematical concepts. The type of research used is Research and Development using the ADDIE model. Based on the results of the study, it shows that: (1) The digital media that has been developed meets the validity criteria based on the assessment of the material and media validator has an average validity percentage value of 88.67% and 86.13% respectively with a very feasible category (2) The digital media that has been developed meets the practical criteria: a) the results of the teacher questionnaire on the media show a practical relevance of 90,67% in the practical category; (b) the results of the student questionnaire on students show a practical relevance of 89.33% in the practical category; (3) the media that has been developed meets the effective criteria with: (a) students' classical learning completeness of 86.67%; (b) the average individual learning completeness of 82.8 means that the learning objectives have been achieved; (c) The learning time was the same as regular learning in the field test and received a positive response from students towards the media. The N-Gain analysis test showed that the average N-gain value of students' mathematical concept understanding using digital media was 0.68, meaning it was in the medium category.

Keywords: *Concept Understanding Ability, Digital Media, Realistic Mathematics Education*