

Durrotul Mufidah Inafah. 2024. *Pengembangan Multimedia Interaktif Berbasis Scaffolding Untuk Menumbuhkan Kemampuan Numerasi Materi Gerak Lurus*. Skripsi, Program Studi Pendidikan Informatika, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing : Dr. Sigit Dwi Saputro, S.Pd., M.Pd.

ABSTRAK

Pembelajaran IPA yang rumit dan banyak perhitungan membuat peserta didik sulit memahami materi. Maka dibutuhkan inovasi baru dalam pembelajaran seperti multimedia interaktif. Penelitian ini bertujuan untuk mengembangkan media pembelajaran multimedia interaktif berbasis *scaffolding* yang layak untuk digunakan sebagai penunjang dalam belajar peserta didik kelas VII di SMP Negeri 3 Bangkalan. Penelitian ini menggunakan model penelitian ADDIE dengan beberapa tahapan diantaranya *Analysis* (Analisis), *Design* (perancangan), *Development* (pengembangan), *Implementation* (implementasi), *Evaluation* (evaluasi). Penelitian ini menghasilkan sebuah media pembelajaran multimedia interaktif berbasis *scaffolding* dengan perolehan penilaian dari ahli materi 95% kriteria sangat valid, ahli media 92.5% kriteria sangat valid, dan ahli konstruk 93.3% kriteria sangat valid. Hasil penelitian respon peserta didik mengenai multimedia interaktif adalah dari penyajian media multimedia interaktif uji coba perorangan dihasilkan nilai keseluruhan sebanyak 91%, dimana persentase media sebesar 89.5% dan penyajian kemampuan numerasi dihasilkan 95.5%. Hasil uji coba pada kelompok kecil dihasilkan nilai keseluruhan sebanyak 94%, pada media sebesar 88.3% dan penyajian kemampuan numerasi dihasilkan 94%. Kemudian hasil uji coba kelompok besar dihasilkan nilai keseluruhan sebanyak 93%, pada penyajian media sebesar 88% dan penyajian kemampuan numerasi dihasilkan 89.3%, semuanya dengan kriteria sangat layak. Sehingga media pembelajaran multimedia interaktif berbasis *scaffolding* pada materi gerak lurus layak digunakan sebagai media pembelajaran.

Kata Kunci: ADDIE, Multimedia Interaktif, *Scaffolding*

Durrotul Mufidah Inafah. 2024. *Development of Scaffolding-Based Interactive Multimedia to Develop Numeracy Capabilities in Rectilinear Motion Materials*. Thesis, Informatics Education Study Program, Faculty of Education, Trunojoyo University Madura. Supervisor: Dr. Sigit Dwi Saputro, S.Pd., M.Pd.

ABSTRACT

Science learning is complicated and has a lot of calculations making it difficult for students to understand the material. So new innovations in learning are needed, such as interactive multimedia. This research aims to develop scaffolding-based interactive multimedia learning media that is suitable for use as a learning support for class VII students at SMP Negeri 3 Bangkalan. This research uses the ADDIE research model with several stages including Analysis, Design, Development, Implementation, Evaluation. This research produced an interactive multimedia learning media based on scaffolding with an assessment obtained from material experts with 95% very valid criteria, media experts with 92.5% very valid criteria, and construction experts with 93.3% very valid criteria. The results of research on student responses regarding interactive multimedia are that from the presentation of interactive multimedia media in individual trials, an overall score of 91% was obtained, where the percentage of media was 89.5% and the presentation of numeracy skills was 95.5%. The results of the trial in the small group produced an overall score of 94%, in the media it was 88.3% and the presentation of numeracy skills was 94%. Then the results of the large group trial produced an overall score of 93%, the media presentation was 88% and the presentation of numeracy skills was 89.3%, all with very decent criteria. So that interactive multimedia learning media based on scaffolding on rectilinear motion material is suitable for use as learning media.

Keywords: *ADDIE, Interactive Multimedia, Scaffolding*