

INTISARI

Kemajuan dalam bidang teknologi informasi dan komunikasi telah memberikan pengaruh dalam menciptakan media pembelajaran yang interaktif, hal ini dapat meningkatkan pemahaman siswa mengenai materi yang diajarkan. Pelajaran Matematika berperan utama dalam berbagai cabang ilmu pengetahuan. Di SD Negeri Celep 02 Nguter Sukoharjo siswa kelas 4 menghadapi tantangan dalam meningkatkan pemahaman dan minat belajar matematika materi bilangan pecahan. Media pembelajaran interaktif 2D dapat menjadi solusi untuk meningkatkan minat dan pemahaman siswa dalam belajar mengajar. Proses pembuatan menggunakan *Software Adobe Animate* dan *Adobe Ilustator*. Metode penelitian yang digunakan adalah ADDIE (*Analisis, Desain, Development, Implementasi dan Evaluasi*).

Pengumpulan data menggunakan wawancara, observasi, studi pustaka, kuesioner serta *pre-test post-test*, metode pendekatan kualitatif dan kuantitatif, SWOT dan skala likert sebagai analisis data. Pembuatan media pembelajaran interaktif memiliki fitur berisi 3 materi yang memiliki visualisasi animasi 2D didalamnya, fitur audio, sound effect tombol, dan suara narasi pada penjelasan materi, fitur *quiz* berupa pilihan ganda acak dan mini *game drag and drop*. Hasil implementasi menunjukkan peningkatan rata-rata nilai siswa dari 60,66 (*pre-test*) menjadi 84 (*post-test*). Selain itu, validasi dari ahli materi menunjukkan bahwa media ini mendapat penilaian sangat layak dengan skor 92,8%.

Kata kunci: Media Pembelajaran Interaktif, Animasi 2 Dimensi, Bilangan Pecahan, ADDIE, SWOT.

ABSTRACT

Advances in information and communication technology have influenced the creation of interactive learning media, which can enhance students' understanding of the material being taught. Mathematics plays a central role in various branches of science. At Celep 02 Nguter Elementary School in Sukoharjo, fourth-grade students face challenges in improving their understanding and interest in learning mathematics, particularly fractions. Interactive 2D learning media can be a solution to increase student interest and understanding in teaching and learning. The development process used Adobe Animate and Adobe Illustrator software. The research method used was ADDIE (Analysis, Design, Development, Implementation, and Evaluation).

Data collection used interviews, observations, literature reviews, questionnaires, pre-tests, and post-tests. Qualitative and quantitative approaches, along with SWOT analysis and a Likert scale, were used for data analysis. The interactive learning media included three materials with 2D animated visualizations, audio features, button sound effects, and voice narration for explanations. Quizzes included random multiple-choice questions and a drag-and-drop mini-game. The implementation results showed an increase in the average student score from 60.66 (pre-test) to 84 (post-test). Furthermore, validation by subject matter experts indicated that this media received a very good rating with a score of 92.8%.

Keywords: Interactive Learning Media, 2D Animation, Fractions, ADDIE, SWOT.