

ABSTRAK

Permasalahan sampah masih menjadi salah satu isu lingkungan yang dihadapi masyarakat Indonesia, termasuk di Kabupaten Banyumas. Kurangnya pemahaman mengenai alur pengelolaan sampah menyebabkan masih banyak masyarakat yang membuang sampah sembarangan dan belum mengetahui proses pengolahan sampah setelah dibuang. Oleh karena itu, diperlukan media edukasi yang menarik dan mudah dipahami untuk meningkatkan pengetahuan sejak usia dini. Penelitian ini bertujuan untuk menghasilkan video animasi 2 dimensi sebagai media edukasi alur pengelolaan sampah di Tempat Pengelolaan Sampah Terpadu (TPST) bagi siswa kelas V SD Negeri 1 Pekuncen. Metode yang digunakan dalam penelitian ini adalah *Multimedia Development Life Cycle* (MDLC) yang terdiri atas enam tahapan, yaitu *concept*, *design*, *material collecting*, *assembly*, *testing*, dan *distribution*. Video animasi dibuat menggunakan teknik *motion graphic* dengan perangkat lunak *Adobe Illustrator* dan *Adobe After Effects*. Penelitian ini melibatkan pengujian validitas oleh ahli media, materi, dan bahasa, serta pengujian efektivitas melalui beta test kepada 30 siswa kelas V menggunakan instrumen pretest dan posttest. Hasil penelitian menunjukkan bahwa rata-rata nilai *pretest* siswa sebesar 6,1 meningkat menjadi 9,4 pada *posttest*. Perhitungan efektivitas melalui N-Gain menunjukkan nilai rata-rata 0,85 yang berada pada kategori Tinggi. Selain itu, hasil validasi dari para ahli menyatakan media berada pada kualifikasi Valid dengan rata-rata persentase kelayakan 92,38%. Dengan demikian, video animasi ini dinyatakan layak dan efektif sebagai media edukasi pendukung pembelajaran di sekolah dasar, serta dapat dikembangkan lebih lanjut dengan penambahan materi pengelolaan sampah B3 agar cakupan edukasi menjadi lebih luas.

Kata kunci: Animasi 2 Dimensi, Edukasi, Pengelolaan Sampah, TPST, Siswa Sekolah Dasar.

ABSTRACT

The problem of waste remains one of the environmental issues facing the Indonesian people, including those in Banyumas Regency. A lack of understanding regarding the waste management process means that many people still dispose of waste improperly and are unaware of what happens to the waste after it is discarded. Therefore, engaging and easy-to-understand educational materials are needed to improve knowledge starting from an early age. This study aims to produce a 2D animated video as an educational tool on the waste management process at the Integrated Waste Management Facility (TPST) for fifth-grade students at SD Negeri 1 Pekuncen. The method used in this study is the Multimedia Development Life Cycle (MDLC), which consists of six stages: concept, design, material collection, assembly, testing, and distribution. The animated video was created using motion graphics techniques with Adobe Illustrator and Adobe After Effects software. This study involved validity testing by experts in media, content, and language, as well as effectiveness testing through a beta test with 30 fifth-grade students using pretest and posttest instruments. The results showed that the students' average pretest score of 6.1 increased to 9.4 on the posttest. The effectiveness calculation using the N-Gain method yielded an average value of 0.85, which falls into the "High" category. Furthermore, the validation results from the experts indicated that the media was classified as "Valid," with an average suitability percentage of 92.38%. Thus, this animated video is deemed suitable and effective as an educational medium to support learning in elementary schools and can be further developed by adding content on hazardous waste management to broaden the scope of education.

Keywords: 2D Animation, Waste Management, Integrated Waste Processing Facility (TPST).