

Maharani Wardah Laksmi. 2021. *Pengembangan Media Pembelajaran Animasi 3D Pada Materi Proses Pertumbuhan dan Perkembangan Tanaman Kelas XI*. Skripsi, Program Studi Pendidikan Informatika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing: Luluk Mauli Diana S.SI., M.Pd.

ABSTRAK

Penelitian ini bertujuan untuk mengembangkan media pembelajaran berbasis animasi 3D pada materi proses pertumbuhan dan perkembangan tanaman di kelas XI SMAN 1 Arosbaya. Pengembangan ini dilakukan untuk mengatasi rendahnya pemahaman siswa terhadap materi yang bersifat abstrak serta keterbatasan media pembelajaran yang tersedia. Model pengembangan yang digunakan adalah ADDIE (*Analysis, Design, Development, Implementation, Evaluation*), dengan dukungan aplikasi seperti *Blender 3D*, *Capcut*, *Unity*, *Canva*, dan *Ibis Paint X*. Teknik pengumpulan data dalam penelitian ini menggunakan observasi, wawancara, dan angket (kuesioner). Untuk mengetahui kelayakan media animasi 3D ini digunakan uji kuesioner terhadap 39 siswa dari dua kelas, yaitu kelas XI-7 dan XI-3. Media yang dikembangkan divalidasi oleh dua ahli materi dan dua ahli media. Hasil validasi menunjukkan bahwa ahli materi memberikan skor rata-rata sebesar 95%, sedangkan ahli media memberikan skor rata-rata 93%, keduanya termasuk dalam kategori “sangat layak.” Uji coba produk dilakukan dalam tiga tahap: uji coba perorangan, kelompok kecil, dan kelompok besar. Hasil respon siswa menunjukkan nilai sebesar 86% pada uji coba perorangan, 89% pada kelompok kecil, dan 91% pada kelompok besar, yang seluruhnya termasuk dalam kategori “sangat baik.” Dengan demikian, media pembelajaran berbasis animasi 3D ini dinyatakan sangat layak dan efektif digunakan untuk membantu meningkatkan pemahaman siswa terhadap materi pertumbuhan dan perkembangan tanaman.

Kata kunci: Animasi 3D, Media Pembelajaran, Model ADDIE, Pengembangan, Pertumbuhan dan Perkembangan Tanaman

Maharani Wardah Laksmi. 2021. *Development of 3D Animation-Based Learning Media on the Topic of Plant Growth and Development for Grade XI Students*. Undergraduate Thesis, Informatics Education Study Program, Faculty of Teacher Training and Education, Trunojoyo University of Madura. Supervisor: Luluk Mauli Diana, S.SI., M.Pd.

ABSTRACT

This research aims to develop a 3D animation-based instructional media on the subject matter of plant growth and development for Grade XI students at SMAN 1 Arosbaya. The development was conducted to address the low level of students' comprehension of abstract concepts, as well as the limited availability of appropriate instructional media. The development model employed in this study is ADDIE (Analysis, Design, Development, Implementation, Evaluation), supported by various applications such as Blender 3D, Capcut, Unity, Canva, and Ibis Paint X. Data collection techniques utilized in this study include observation, interviews, and questionnaires. To assess the feasibility of the 3D animation media, a questionnaire was distributed to 39 students from two classes, namely XI-7 and XI-3. The developed media was validated by two subject matter experts and two media experts. The validation results indicated that the subject matter experts assigned an average score of 95%, while the media experts provided an average score of 93%. Both scores fall under the category of "highly feasible." Product testing was carried out in three stages: individual testing, small group testing, and large group testing. Student response results demonstrated scores of 86% in individual testing, 89% in small group testing, and 91% in large group testing, all of which are classified as "very good." Based on these findings, the 3D animation-based instructional media is considered to be highly feasible and effective in enhancing students' understanding of the plant growth and development material.

Keywords: 3D Animation, Learning Media, ADDIE Model, Development, Plant Growth and Development