

ABSTRAK

Fadilah Ismail, NIM 4203141004. “Pengembangan Media Pembelajaran Komik Digital dilengkapi Video Faktual sebagai Media Pembelajaran Mata Kuliah Kultur Jaringan”.

Penelitian ini dilatarbelakangi oleh kesulitan mahasiswa pendidikan biologi dalam memahami materi kultur jaringan yang berbasis teknik tanpa adanya praktikum dan kurangnya alternatif media pembelajaran berbasis teknologi selain *Powerpoint* dalam proses perkuliahan kultur jaringan. Dengan adanya permasalahan tersebut maka peneliti mengembangkan media pembelajaran komik digital dilengkapi video faktual untuk membantu mahasiswa memahami materi dengan baik. Media komik digital yang dikembangkan dinilai kelayakan dan keefektifannya berdasarkan penilaian ahli materi, ahli media, serta respon mahasiswa untuk mata kuliah kultur jaringan materi teknik kultur kalus. Model pengembangan yang digunakan adalah model ADDIE yang terdiri dari tahapan pengembangan yang sistematis sehingga dapat menghasilkan media pembelajaran komik digital dilengkapi video faktual yang layak dan efektif digunakan sebagai alternatif media pembelajaran pada materi kultur kalus. Responden penelitian terdiri dari 26 mahasiswa Pendidikan Biologi Universitas Negeri Medan. Berdasarkan hasil angket penilaian kelayakan media komik digital yang dilengkapi video faktual oleh ahli materi mendapat skor 90% (sangat layak), ahli media 83,33%, (sangat layak) serta berdasarkan persentase respon mahasiswa dengan skor 88,75% (sangat menarik) pada uji coba perorangan, 90,11% (sangat menarik) pada uji coba kelompok kecil, dan 91,21% (sangat menarik) pada uji kelompok terbatas. Hasil keefektifan menunjukkan komik digital materi teknik kultur jaringan pada kultur kalus pada mata kuliah kultur jaringan dengan rata-rata N-Gain 0,7 (kategori tinggi).

Kata kunci: media pembelajaran, kultur jaringan, komik digital

ABSTRACT

Fadilah Ismail, NIM 4203141004. "Development of Digital Comic Learning Media equipped with Factual Videos as Learning Media for Tissue Culture Courses".

This research was motivated by the difficulty of biology education students in understanding technique-based tissue culture material without practicums and the lack of alternative technology-based learning media other than Powerpoint in the tissue culture lecture process. Given these problems, researchers developed digital comic learning media equipped with factual videos to help students understand the material well. The digital comic media that was developed was assessed for its feasibility and effectiveness based on the assessment of material experts, media experts, and student responses for the tissue culture course, material on callus culture techniques. The development model used is the ADDIE model which consists of systematic development stages so that it can produce digital comic learning media equipped with factual videos that are feasible and effective for use as an alternative learning media on callus culture material. The research respondents consisted of 26 Biology Education students at Medan State University. Based on the results of a questionnaire assessing the feasibility of digital comic media equipped with factual videos, material experts received a score of 90% (very feasible), media experts 83.33% (very appropriate) and based on the percentage of student responses with a score of 88.75% (very interesting). in individual trials, 90.11% (very interesting) in small group trials, and 91.21% (very interesting) in limited group trials. The effectiveness results show that digital comics material on tissue culture techniques in callus culture in tissue culture courses with an average N-Gain of 0.7 (high category).

Key words: *learning media, tissue culture, digital comics*

