

Ray Albian Prakasa. 2023. Pengembangan *Game* Edukasi Berbasis *Unity* Pada Materi Sistem Persamaan Linear Dua Variabel (SPLDV). Skripsi, Program Studi Pendidikan Informatika, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing: Puji Rahayu Ningsih, S.Pd., M.Pd.

ABSTRAK

Mata pelajaran matematika yang cenderung membosankan mengakibatkan siswa–siswi kurang mampu dalam memahami materi–materi yang diajarkan khususnya pada materi sistem persamaan linear dua variabel. Penelitian ini bertujuan untuk mengembangkan *game* edukasi. Penelitian ini menggunakan model pengembangan GDLC (*Game Development Life Cycle*) yang terdiri dari beberapa tahapan yaitu *Initiation, Design, Production, Alpha Testing, Beta Testing, Realese*. Instrument penelitian berupa angket atau kuesioner. Hasil Pengujian penelien ini ialah 1) pengujian Blackbox dan Pengujian Media oleh dosen dan mendapatkan hasil bahwa Tampilan serta fitur telah sesuai dengan hasil yang diharapkan. 2) Pada Pengujian Ahli materi oleh guru dan dosen mendapatkan hasil yang sesuai dengan indikator penilaian. 3) Pengujian Angket respon oleh dosen mendapatkan hasil **87,5%** dan masuk pada kategori sangat layak. 4) Hasil pengujian System Usability Scale (SUS) mendapatkan skor 77 dengan skala Nilai SUS bernilai “C”, *game* dapat dikategorikan “*Excellent*” dan dapat termasuk *acceptable* atau “Layak”. 6) Pada pengujian guru mata pelajaran matematika mendapatkan nilai 100% dan masuk dalam kategori sangat layak. Dapat diketahui dari beberapa uji coba yang dilakukan bahwa *Game* Edukasi dapat masuk ke dalam kategori layak digunakan.

Kata Kunci : *Game* Edukasi, *Unity*, *GDLC* , Sistem Persamaan Linear Dua Variabel

Ray Albian Prakasa. 2023. *Development of a Unity-Based Educational Game on Two-Variable Linear Equation System Material (SPLDV)*. Thesis, Informatics Education Study Program, Faculty of Education, Trunojoyo University, Madura. Advisor : Puji Rahayu Ningsih, S.Pd., M.Pd.

ABSTRACT

Mathematics subjects which tend to be boring result in students being less able to understand the material being taught, especially in the matter of systems of two-variable linear equations. This research aims to develop educational games. This study uses the GDLC (Game Development Life Cycle) development model which consists of several stages, namely Initiation, Design, Production, Alpha Testing, Beta Testing, Realese. The research instrument is a questionnaire or questionnaire. The results of this research test are 1) Blackbox testing and Media Testing by the lecturer and getting the result that the appearance and features are in accordance with the expected results. 2) In the Expert Testing of material by teachers and lecturers, the results are in accordance with the assessment indicators. 3) Testing the response questionnaire by the lecturers obtained 87.5% results and was included in the very feasible category. 4) The results of the System Usability Scale (SUS) test get a score of 77 with the SUS value scale being "C", the game can be categorized as "Excellent" and can be classified as acceptable or "Decent". 6) In testing the mathematics subject teacher gets a score of 100% and is included in the very decent category. It can be seen from several trials conducted that Educational Games can fall into the category of proper use.

Keywords: *Educational Game, Unity, GDLC , System of Two Variable Linear Equations*