

Retno Ayu Suhartanti. 2025. *Pengembangan Media Pembelajaran Game Edukasi 2D Platformer Berbasis Android Pada Materi Sistem Bilangan*. Skripsi, Program Studi Pendidikan Informatika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing: Muchamad Arif, S.Pd., M.Pd.

## ABSTRAK

Penelitian ini bertujuan untuk mengembangkan media pembelajaran berupa *game* edukasi 2D platformer berbasis *Android* pada materi sistem bilangan, ditujukan untuk siswa kelas X TKJ di SMK Darul Mustofa. Latar belakang penelitian ini adalah rendahnya minat belajar siswa, terbatasnya media pembelajaran yang digunakan, serta kesulitan dalam memahami materi sistem bilangan. Penelitian ini menggunakan metode *Research and Development* (R&D) dengan model ADDIE yang mencakup lima tahapan, yaitu: *Analysis*, *Design*, *Development*, *Implementation*, dan *Evaluation*. Data dikumpulkan melalui wawancara dan angket, kemudian dianalisis secara deskriptif kualitatif dan kuantitatif. Hasil penelitian menunjukkan bahwa media pembelajaran yang dikembangkan mendapatkan penilaian sangat layak dari ahli, yaitu: 91% dari ahli materi 1, 93% dari ahli materi 2, dan 97% dari ahli media. Sementara itu, hasil uji coba kepada siswa juga menunjukkan respon sangat positif, yaitu: 88% pada uji coba perorangan, 98% pada uji coba kelompok kecil, dan 97% pada uji coba kelompok besar. Berdasarkan hasil validasi ahli materi dan media, media pembelajaran *game* edukasi 2D platformer berbasis *android* dinyatakan “sangat layak”. Sementara itu, hasil uji coba kepada siswa menunjukkan respon yang “sangat positif”. Dengan demikian, media ini sangat sesuai digunakan sebagai media pembelajaran pada materi sistem bilangan untuk siswa kelas X TKJ (Teknik Komputer dan Jaringan) di SMK Darul Mustofa.

**Kata Kunci : ADDIE, Media Pembelajaran, *Game* Edukasi, Sistem Bilangan**

Retno Ayu Suhartanti. 2025. *Development of an Android-Based 2D Platformer Educational Game as a Learning Media on Number System Material*. Thesis, Informatics Education Study Program, Faculty of Teacher Training and Education, Trunojoyo University Madura. Advisor : Muchamad Arif, S.Pd., M.Pd.

### **ABSTRACT**

*This study aims to develop learning media in the form of an Android-based 2D platformer educational game on the number system material, aimed at class X TKJ students at SMK Darul Mustofa. The background of this study is the low interest in learning students, limited learning media used, and difficulties in understanding the number system material. This study uses the Research and Development (R&D) method with the ADDIE model which includes five stages, namely: Analysis, Design, Development, Implementation, and Evaluation. Data were collected through interviews and questionnaires, then analyzed descriptively qualitatively and quantitatively. The results of the study showed that the developed learning media received a very feasible assessment from experts, namely: 91% from material expert 1, 93% from material expert 2, and 97% from media experts. Meanwhile, the results of the trial to students also showed a very positive response, namely: 88% in individual trials, 98% in small group trials, and 97% in large group trials. Based on the results of the validation of material and media experts, the Android-based 2D platformer educational game learning media was declared "very feasible". Meanwhile, the results of the trial to students showed a "very positive" response. Thus, this media is very suitable to be used as a learning medium for the number system material for class X TKJ (Computer and Network Engineering) students at SMK Darul Mustofa.*

**Keywords:** *ADDIE, Learning Media, Educational Games, Number System*