

ABSTRACT

Hikmawati Setyaningsih, 2023, **Designing Educational Games Based on Macromedia Flash 8 in the Basic Subjects of Graphic Design Class X at Muhammadiyah 1 Vocational High School, Padang, Academic Year 2022/2023, Bachelor of Informatics Engineering Education, Faculty of Teaching Science and Education, University of Putra Indonesia.**

The research and design of this educational game aims to increase students' interest in learning the basic subjects of graphic design. And it is motivated by the problem of limited learning media which will later affect student learning outcomes. Therefore this study aims to determine the validity, practicality and effectiveness of educational games in class X SMK Muhammadiyah 1 Padang. This research aims to make educational games on basic graphic design subjects at SMK Muhammadiyah 1 Padang. This study uses research and development (R&D) methods. The research model used is the ADDIE development model, with the design and development steps as follows: Analysis, Design, Develop, Implementation and Evaluation. The research subjects totaled 31 students. The results of the validity test for educational games in the basic subjects of graphic design at Muhammadiyah 1 Padang Vocational School were 87.13%, so that the validity level can be interpreted as very valid to use. The results of the practicality test assessment of educational games in the basic subjects of graphic design educational games in the basic subjects of graphic design at SMK Muhammadiyah 1 Padang amounted to 91.25%, so that the level of practicality can be interpreted as very practical to use. The results of the evaluation of the effectiveness test for educational games in the basic subjects of graphic design at SMK Muhammadiyah 1 Padang amounted to 85.32%, so that the level of effectiveness can be interpreted as effective use. In conclusion, based on the assessment of input from experts along with the results of field trials of educational games, their feasibility has been tested and can be used in the process of developing basic graphic design subjects at SMK Muhammadiyah 1 Padang,

Keywords: macromedia flash, basic graphic design

ABSTRAK

Hikmawati Setyaningsih, 2023, **Perancangan Game Edukasi Berbasis Macromedia Flash 8 Pada Mata Pelajaran Dasar Desain Grafis Kelas X Di Smk Muhammadiyah 1 Padang Tahun Ajaran 2022/2023**, Sarjana Pendidikan Teknik Informatika Fakultas Keguruan Ilmu Dan Pendidikan Universitas Putra Indonesia.

Penelitian dan perancangan *game edukasi* ini bertujuan untuk meningkatkan minat belajar siswa terhadap mata pelajaran dasar desain grafis. Dan dilatar belakangi oleh permasalahan keterbatasan media belajar yang nantinya akan mempengaruhi hasil belajar siswa. Oleh karena itu penelitian ini bertujuan untuk mengetahui Validitas, Praktikalitas dan Efektifitas *game edukasi* di kelas X Smk Muhammadiyah 1 Padang. Penelitian ini bertujuan untuk membuat *game edukasi* pada mata pelajaran dasar desain grafis Smk Muhammadiyah 1 Padang. Penelitian ini menggunakan metode penelitian dan pengembangan (R&D). Model penelitian yang digunakan adalah model pengembangan ADDIE, dengan desain dan langkah-langkah pengembangannya adalah sebagai berikut Analisis (analisis), Design (perancangan), Develop (Pengembangan), Implementation (implementasi) dan Evalution (evaluasi). Subjek penelitian berjumlah 31 orang siswa. Hasil uji validitas terhadap *game edukasi* pada mata pelajaran dasar desain grafis Smk Muhammadiyah 1 Padang sebesar 87,13%, sehingga tingkat validitas dapat diinterpretasikan sangat valid digunakan. Hasil penilaian uji praktikalitas terhadap *game edukasi* pada mata pelajaran dasar desain grafis *game edukasi* pada mata pelajaran dasar desain grafis Smk Muhammadiyah 1 Padang sebesar 91,25%, sehingga tingkat praktikalitasnya dapat diinterpretasikan sangat praktis digunakan. Hasil penilaian uji efektivitas terhadap *game edukasi* pada mata pelajaran dasar desain grafis Smk Muhammadiyah 1 Padang sebesar 85,32%, sehingga tingkat efektivitasnya dapat diinterpretasikan efektif digunakan. Kesimpulannya, Berdasarkan penilaian masukan dari para ahli beserta hasil uji coba lapangan *game edukasi* sudah teruji kelayakannya dan dapat digunakan pada proses pengembangan mata pelajaran dasar desain grafis Smk Muhammadiyah 1 Padang

Kata Kunci : *macromedia flash*, dasar desain grafis