

Siska Aprilia Sari. 2022. *Pengembangan Media Pembelajaran Berbasis Android Animasi 2D Pada Mata Pelajaran Fisika Elastisitas bahan*. Skripsi, Program Studi Pendidikan Informatika, Fakultas Ilmu Pendidikan, Universitas Trunojoyo Madura. Pembimbing : Nuru Aini.

ABSTRAK

Kegiatan belajar mengajar fisika di SMK Ma'arif NU Prambon pada masa pandemi covid-19 memiliki keterbatasan media pembelajaran berupa buku panduan serta berkurangnya jam pelajaran sehingga siswa kurang memahami materi di kelas dan tidak dapat belajar secara mandiri di rumah. Penelitian ini bertujuan untuk mengembangkan serta mengetahui tingkat kelayakan media pembelajaran berbasis android animasi 2D untuk digunakan pada kegiatan belajar mengajar fisika materi elastisitas bahan di SMK Ma'arif NU Prambon. Penggunaan teknologi, *smartphone*, menjadi salah satu alternatif untuk digunakan pada media pembelajaran dengan menampilkan animasi 2D sebagai ilustrasi materi. Penelitian pengembangan ini menggunakan model pengembangan ADDIE yang terdiri dari 5 tahapan yaitu *Analysis*, *Design*, *Development*, *Implementation*, dan *Evaluation* dengan subjek penelitian adalah peserta didik kelas X Multimedia. Produk hasil penelitian ini berupa aplikasi media pembelajaran berbasis android animasi 2D yang dapat diinstal pada android dengan minimal versi android 4.4 KitKat (API level 19) yang kemudian divalidasi oleh ahli media dan ahli materi, lalu diuji cobakan ke peserta didik kelas X Multimedia SMK Ma'arif NU Prambon. Hasil penelitian ini diperoleh hasil validasi ahli media sebesar 97%, ahli materi 1 sebesar 95% dan ahli materi 2 sebesar 97% dengan kategori "sangat layak" untuk diuji cobakan. Berdasarkan hasil uji coba didapatkan hasil uji coba perorangan sebesar 79%, uji coba kelompok kecil sebesar 84% dan uji coba lapangan sebesar 80% yang memenuhi kualifikasi "sangat layak". Sehingga simpulan dari penelitian ini yaitu media pembelajaran yang dikembangkan layak digunakan dalam kegiatan belajar mengajar.

Kata kunci: ADDIE, animasi 2D, elastisitas bahan, media pembelajaran, android.

Siska Aprilia Sari. 2022. *Development of 2D Animation Android-Based Learning Media in The Physics Subject of Elasticity of materials*. Thesis, Informatics Education Study Program, Faculty of Education, Trunojoyo Madura University. Supervisor: Nuru Aini.

ABSTRACT

Teaching and learning activities for physics at SMK Ma'arif NU Prambon during the covid-19 pandemic had limited learning media in the form of guidebooks and reduced lesson hours so that students did not understand the material in class and could not study independently at home. This study aims to develop and determine the level of feasibility of 2D animated android-based learning media to be used in teaching and learning activities physics material elasticity of materials at SMK Ma'arif NU Prambon. The use of technology, smartphones, is an alternative to be used in learning media by displaying 2D animation as an illustration of the material. This development research uses the ADDIE development model which consists of 5 stages, namely Analysis, Design, Development, Implementation, and Evaluation with the research subjects being students of class X Multimedia. The product of this research is in the form of a 2D animated android-based learning media application that can be installed on android with a minimum version of android 4.4 KitKat (API level 19) which is then validated by media experts and material experts, then tested to students of class X Multimedia SMK Ma'arif NU Prambon. The results of this study obtained the results of media expert validation by 97%, material expert 1 by 95% and material expert 2 by 97% with the "very feasible" category to be tested. Based on the results of the trial, the results of individual trials were 79%, small group trials were 84% and field trials were 80% which met the "very feasible" qualifications. So the conclusion of this study is that the learning media developed is suitable for use in teaching and learning activities.

Keywords: ADDIE, 2D animation, elasticity of materials, learning media, android.