

ABSTRACT

Faisol, Ahmad, Arya . 2017. The Development of Learning Media Based on Augmented Reality on Material Introduction of Electronic Components in Class X Department of TKJ in SMKS Ibnu Cholil Bangkalan Thesis, Education of Informatic departments, Sarjana Degree University of Trunojoyo Madura. Advisor I Koko Joni, ST., M.Eng., and Advisor II Wanda Ramansyah, S.Pd., M.Pd

Keywords: Learning Media, Augmented Reality, AR- Elek, Component Electronic.

Electronic component introduction material is a lesson that must be mastered and understood by Vocational High School students. In this lesson, the teacher teaches by using talkative method with instructional media in the form of notebook and presentation slides. It makes students feel bored, tired, and difficult to remember the subject matter.

The research and this development aims to make a learning media based on Augmented reality on lesson of recognition component electronics in Class of X TKJ (Technology of computer network) Major that will make it easy the students in understanding or recognize the component electronic. This research used *Kemp and Dayton* model, this model has eight steps in developing learning media, that is : (1) The idea or the purpose of general learning, (2) the specific purpose learning, (3) The characteristics of audiences, (4) The content outline (content outline), (5) treatment, (6) storyboard, (7) script (script), (8) developing, editing, and mixing. And (9) testing and revising. The results were obtained : test some experts, the matery experts obtained percentage 84,3 % with qualification “high”, and media experts test obtained percentage 75,5 % with qualification “high”. Whereas the individual test were obtained percentage 88,0 % with qualification “high”, and a big group test were obtained percentage 80,9 % with qualification “high”, and the big group test were obtained percentage 81,6 % with qualification “high”.

This research suggest: (1) The product of learning media based on augmented reality on lesson of recognition of component electronics can developed or build to the PC/ *Dekstop*. (2) The next development more better, especially on loading process. (3) The next development added component electronic that did not exist on the AR- Elek media.

ABSTRAK

Faisol, Ahmad, Arya. 2017. *Pengembangan Media Pembelajaran Berbasis Augmented Reality pada Materi Pengenalan Komponen Elektronika di Kelas X Jurusan TKJ di SMKS Ibnu Cholil Bangkalan*. Skripsi, Program Studi Pendidikan Informatika, Program Sarjana Universitas Trunojoyo Madura. Pembimbing (I) Koko Joni, ST., M.Eng., dan (II) Wanda Ramansyah, S.Pd., M.Pd.

Kata-kata Kunci: Media Pembelajaran, *Augmented Reality*, AR-Elek, Komponen Elektronika,

Materi pengenalan komponen elektronika merupakan pelajaran yang harus dikuasai dan dipahami oleh siswa Sekolah Menengah Kejuruan Pada pelajaran ini guru mengajar menggunakan metode ceramah dengan media pembelajaran berupa buku tulis dan slide presentasi. Hal tersebut membuat siswa merasa bosan, jenuh, dan sulit mengingat materi pelajaran.

Penelitian dan pengembangan ini bertujuan untuk membuat media pembelajaran Berbasis *Augmented Reality* pada pelajaran pengenalan komponen elektronika kelas X jurusan TKJ (Teknik Komputer Jaringan) yang akan mempermudah siswa dalam memahami atau mengenal komponen elektronika. Penelitian ini menggunakan model *Kemp dan Dayton*, model ini memiliki delapan langkah dalam pengembangan media pembelajaran, yaitu: (1) ide atau tujuan umum pembelajaran, (2) tujuan khusus pembelajaran, (3) karakteristik audiens, (4) isi materi (*content outline*), (5) *treatment*, (6) *storyboard*, (7) naskah (*script*), (8) *developing, editing, and mixing*, dan (9) *testing and revising*. Hasil penelitian diperoleh: uji coba para ahli, ahli materi diperoleh prosentase 84,3% dengan kualifikasi “tinggi”, dan uji coba ahli media diperoleh prosentase 75,5% dengan kualifikasi “tinggi”. Sedangkan uji coba perorangan diperoleh prosentase 88,0% dengan kualifikasi “tinggi”, uji coba kelompok besar diperoleh prosentase 80,9% dengan prosentase “tinggi”, dan uji coba kelompok besar diperoleh prosentase 81,6% dengan kualifikasi “tinggi”.

Peneliti menyarankan: (1) Produk Media pembelajaran berbasis *augmented reality* pada pelajaran pengenalan komponen elektronika bisa dikembangkan atau di *buid* ke PC/ *Dekstop*. (2) Pengembangan selanjutnya lebih baik terutama dalam proses loading. (3) Pengembangan selanjutnya ditambahkan komponen elektronika yang belum ada pada media AR-Elek ini.