**Murti, A.F. 2023** “*Pengembangan Multimedia Pembelajaran Interaktif Mata Pelajaran Komputer Dan Jaringan Dasar Kelas X Berbasis Augmented Reality Jurusan Rekayasa Perangkat Lunak (Studi kasus: SMK N YPKK 1 Sleman)*”. Tugas Akhir. Yogyakarta: Program Studi Pendidikan Teknologi Informasi Universitas Teknologi Yogyakarta. Pembimbing: Dwi Ratnawati, S.Pd., M. Pd.

**ABSTRAK**

Hasil observasi dan wawancara yang dilakukan terhadap proses pembelajaran pada kelas X jurusaan Rekayasa Perangkat Lunak di SMK YPKK 1 Sleman, siswa masih kurang mampu dalam memahami materi, baik secara teori maupun praktik. Terbatasnya buku panduan ataupun lks juga menjadi faktor penghambat pada proses pembelajaran siswa. Penelitian bertujuan untuk mengembangkan dan menguji multimedia pembelajaran interaktif mata pelajaran komputer dan jaringan dasar kelas x berbasis android jurusan rekayasa perangkat lunak. Kurangnya referensi siswa terhadap komponen komputer dan terbatasnya guru dalam pengajaran yang hanya mengandalkan buku paket materi jaringan komputer dasar. Metode penelitian menggunakan pendekatan *Research and Development* (R&D) serta menggunakan model pengembangan ADDIE yang terdiri dari 5 tahap pengembangan, yaitu (1) Analisis (2) Desain (3) Pengembangan (4) Implementasi (5) Evaluasi produk melalui pengujian ahli media dan ahli materi serta siswa kelas X Rekayasa Perangkat Lunak di SMK YPKK 1 Sleman. Hasil pengujian kelayakan ahli media pada aspek instruksional dan aspek tampilan mendapatkan skor 100% dengan skor total 100% dalam kategori sangat layak. Hasil pengujian kelayakan ahli materi pada aspek isi dan aspek manfaat mendapatkan skor 100% dengan skor total 100% dalam kategori sangat layak. Hasil pengujian kelayakan siswa pada aspek desain media mendapatkan skor 94%, aspek pengoperasian media mendapatkan skor 95%, dan aspek kebermanfaatan materi mendapatkan skor 97% dan mendapatkan skor total 95% dalam kategori sangat layak. Multimedia pembelajaran interaktif mata pelajaran komputer dan jaringan dasar kelas X berbasis android jurusan rekayasa perangkat lunak sangat layak digunakan.

Kata kunci: Media Pembelajaran, *Augmented Reality* (AR), Komponen Komputer, Android

**Murti, A.F. 2023.** *"* *Development of Multimedia for Interactive Learning in Komputer and Basic Network Subjects for Class X Based on Augmented Reality Software Engineering Department (Case study: SMK N YPKK 1 Sleman)".* Thesis. Yogyakarta: Information Technology Education Study Program University of Technology Yogyakarta. Advisor: Dwi Ratnawati, S.Pd., M. Pd.

**ABSTRACT**

The results of observations and interviews conducted on the learning process in class X majoring in Software Engineering at SMK YPKK 1 Sleman, students are still unable to understand the material, both in theory and practice. Limited guidebooks or worksheets are also an inhibiting factor in the student learning process. The aim of the study was to develop and test interactive learning multimedia for computer and basic networking subjects for Android-based class X majoring in software engineering. Lack of student references to computer components and limited teachers in teaching who only rely on basic computer network material package books. The research method uses a Research and Development (R&D) approach and uses the ADDIE development model which consists of 5 stages of development, namely (1) Analysis (2) Design (3) Development (4) Implementation (5) Product evaluation through testing by media experts and experts materials and students of class X Software Engineering at SMK YPKK 1 Sleman. The results of the media expert feasibility test on the instructional aspect and the display aspect get a score of 100% with a total score of 100% in the very feasible category. The results of the material expert feasibility test on the content and benefits aspects get a score of 100% with a total score of 100% in the very feasible category. The results of the student feasibility test on aspects of media design get a score of 94%, aspects of media operation get a score of 95%, and aspects of material usability get a score of 97% and get a total score of 95% in the very feasible category. Interactive learning multimedia for computer and basic networking subjects for class X based on android, majoring in software engineering, is very feasible to use.

*Keywords: Learning Media, Augmented Reality (AR), Computer Components, Android*