ABSTRAK

Nabila Aulia : Pengembangan Media Interaktif Pada Mata Pelajaran Administrasi Infrastruktur Jaringan Menggunakan Metode CAI (Computer Assisted Instruction) di SMK Ar–Rahman Medan. Skripsi. Fakultas Teknik Universitas Negeri Medan 2023.

Pada proses belajar mengajar, guru dituntut untuk membuat pembelajaran lebih menarik dan inovatif sehingga penggunaan media pembelajaran yang kurang optimal membuat siswa kurang termotivasi dalam proses belajar mengajar. Dari hasil observasi dan wawancara yang telah dilakukan peneliti media pembelajaran yang digunakan dalam proses pembelajaran masih menggunakan slide powerpoint dan buku paket. Dan siswa lebih suka berkontribusi langsung dengan komputer sehingga membuat siswa lebih tertarik dan lebih memahami materi yang disampaikan. Penelitian ini bertujuan untuk mengembangkan media pembelajaran interaktif *Menggunakan Metode CAI (Computer Assisted Instruction* pada mata pelajaran administrasi infrastruktur jaringan dan untuk mengetahui kelayakan serta efektivitas dari penggunaan media. Penelitian ini dilakukan pada kelas XI TKJ 2 SMK AR-RAHMAN MEDAN.

Prosedur penelitian ini menggunakan model ADDIE yaitu *analyze, design, development, implementation, evaluation.*Penelitian ini dilaksanakan pada SMK AR-RAHMAN MEDAN kelas XI TKJ 2 . Hasil penelitian berupa pengembangan media Interaktif pada mata pelajaran Administrasi Infrastruktur jaringan menggunakan metode CAI (*Computer Assisted Instruction*).

Berdasarkan hasil penelitian yang dilakukan pada uji kelayakan materi,media dan akseptabilitas pengguna produk menyatakan bahwa media pembelajaran pembelajaran interaktif menggunakan metode CAI *(Computer Assisted Instruction)* sangat layak digunakan. Dan hasil perhitungan mean N *Gain Score* kelas eksperimen menunjukkan nilai 0.87, dan perhitungan rmean N Gain Score kelas Kontrol menunjukan nilai 0.74 yang termasuk ke dalam kategori "Tinggi" ($g > 0,7$) sesuai tafsiran keefektifan indeks *gain* menurut Hake sehingga dapat dikatakan bahwa media pembelajaran interaktif menggunakan metode CAI *(Computer Assisted Instruction)* efektif untuk digunakan oleh peserta didik pada mata pelajaran Administrasi Infrastruktur jaringan pada kelas XI TKJ 2 SMK Ar-Rahman Medan.

Kata Kunci : Media Pembelajaran Interaktif, CAI (*Computer Assisted Instruction*), dan ADDIE.

ABSTRACT

Nabila Aulia: Development of Interactive Media in the Subject of Network Infrastructure Administration Using the CAI (Computer Assisted Instruction) Method at SMK Ar–Rahman Medan. Thesis. Faculty of Engineering, State University of Medan 2023.

In the teaching and learning process, teachers are required to make learning more interesting and innovative so that the use of learning media that is less than optimal makes students less motivated in the teaching and learning process. From the results of observations and interviews that have been conducted by researchers, the learning media used in the learning process still use PowerPoint slides and textbooks. And students prefer to contribute directly with computers so as to make students more interested and better understand the material presented. This study aims to develop interactive learning media using the CAI (Computer Assisted Instruction) Method in network infrastructure administration subjects and to determine the feasibility and effectiveness of using media. This research was conducted in class XI TKJ 2 SMK AR-RAHMAN MEDAN.

The research procedure used the ADDIE model, namely analyze, design, development, implementation, evaluation. This research was conducted at AR-RAHMAN MEDAN SMK class XI TKJ 2. The results of the study are the development of interactive media in the network infrastructure administration subject using the CAI (Computer Assisted Instruction) method.

Based on the results of research conducted on the feasibility test of material, media and product user acceptability stated that interactive learning media using the CAI (Computer Assisted Instruction) method were very feasible to use. And the results of calculating the mean N Gain Score for the experimental class show a value of 0.87, and the calculation of the rmean N Gain Score for the Control class shows a value of 0.74 which is included in the "High" category (g> 0.7) according to the interpretation of the effectiveness of the gain index according to Hake so that it can be said that interactive learning media using the CAI (Computer Assisted Instruction) method are effective for use by students in the Network Infrastructure Administration subject in class XI TKJ 2 SMK Ar-Rahman Medan.

Keywords*: Interactive Learning Media, CAI (Computer Assisted Instruction), and ADDIE.*