ABSTRAK

USMAN, NIM 5171122011 : *Pengembangan Media Pembelajaran Interaktif Pemeliharaan Sistem Air Conditioning (AC) Berbasis Macromedia Flash 8 Pada Siswa Kelas XII TKR di SMK Bima Utomo BS Batang Kuis*. Skripsi. Fakultas Teknik Universitas Negri Medan. 2022.

Penelitian ini bertujuan untuk: (1) mengetahui hasil proses pengembangan media pembelajaran interaktif pemeliharaan *Air Conditioning* (AC) berbasis *Macromedia Flash* 8; (2) penilaian kelayakan ahli materi, ahli media dan ahli desain pembelajaran terhadap media pembelajaran interaktif pemeliharaan *Air Conditioning* (AC) berbasis *Macromedia Flash* 8; (3) Mendapatkan hasil penilaian oleh siswa kelas XII jurusan Teknik Kendaraan Ringan terhadap media pembelajaran interaktif pemeliharaan *Air Conditioning* (AC) berbasis *Macromedia Flash* 8.

Jenis penelitian dan pengembangan (*Research and Development*) ini menggunakan model pengembangan ADDIE. Penelitian ini dilakukan di SMK Bima Utomo BS Batang Kuis. Metode yang digunakan dalam pengumpulan data yaitu angket.

Hasil penelitian dan pengembangan: (1) Proses penelitian pengembangan ini dilaksanakan melalui empat tahapan yang diadaptasi dari model penelitian pengembangan versi ADDIE. Adapun tahapan tersebut yaitu: A*nalysis, Design, Development,* dan *Implementation*. Tahap *analysis* meliputi studi lapangan dan studi literatur. Tahap *design* melitputi pembuatan *flowchart* dan *storyboard*. Tahap *development*, media pembelajaran interaktif berbasis *Macromedia Flash* 8 di validasi oleh 1 ahli materi, 1 ahli media dan 1 ahli desain pembelajaran. Tahap implementasi melalui dua tahapan yaitu uji coba kelompok kecil (4 siswa) dan Uji Coba Lapangan (25 siswa). (2) tingkat kelayakan media pembelajaran interaktif *Macromedia Flash 8* berdasarkan penilaian ahli materi diperoleh rata-rata 3,64 yang termasuk dalam kategori sangat layak, ahli media diperoleh rata-rata 3,43 yang termasuk dalam kategori sangat layak, dan ahli desain pembelajaran diperoleh rata-rata 3,56 yang termasuk dalam kategori sangat layak; (3) Penilaian siswa diperoleh rata-rata skor keseluruhan 3,58 yang termasuk dalam kategori sangat layak. Dengan demikian, media pembelajaran interaktif berbasis *Macromedia Flash* 8 yang dikembangkan ini sangat layak digunakan sebagai media pembelajaran Pemeliharaan Sistem *Air Conditioning* (AC).

Kata kunci: Media Pembelajaran Interaktif, *Macromedia Flash 8*, ADDIE

ABSTRACT

USMAN, NIM 5171122011: Development of Interactive Learning Media for Air Conditioning System Maintenance (AC) Based on Macromedia Flash 8 for Class XII TKR Students at SMK Bima Utomo BS Batang Quis. Thesis. Faculty of Engineering, State University of Medan. 2022.

This study aims to: (1) determine the results of the interactive learning media development process for Air Conditioning (AC) maintenance based on Macromedia Flash 8; (2) assessment of the feasibility of material experts, media experts and learning design experts on interactive learning media for Air Conditioning (AC) maintenance based on Macromedia Flash 8; (3) Obtaining the results of the assessment by class XII students majoring in Light Vehicle Engineering on interactive learning media for Air Conditioning (AC) maintenance based on Macromedia Flash 8.

This type of research and development uses the ADDIE development model. This research was conducted at SMK Bima Utomo BS Batang Kuis. The method used in data collection is a questionnaire.

The results of research and development: (1) The research and development process was carried out through four stages which were adapted from the ADDIE version of the development research model. The stages are: Analysis, Design, Development, and Implementation. The analysis phase includes field studies and literature studies. The design stage includes making flowcharts and storyboards. In the development stage, interactive learning media based on Macromedia Flash 8 was validated by 1 material expert, 1 media expert and 1 learning design expert. The implementation phase includes two stages, namely small group trials (4 students) and field trials (25 students). (2) the feasibility level of interactive learning media Macromedia Flash 8 based on the assessment of material experts obtained an average of 3.64 which is included in the very feasible category, media experts obtained an average of 3.43 which is included in the very feasible category, and learning design experts obtained an average of 3.56 which is included in the very decent category; (3) Student assessment obtained an average overall score of 3.58 which is included in the very decent category. Thus, the developed interactive learning media based on Macromedia Flash 8 is very suitable to be used as a learning medium for Air Conditioning System Maintenance (AC).

Keywords: Interactive Learning Media, Macromedia Flash 8, ADDIE