

## ABSTRAK

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*Pengembangan Media Pembelajaran Pemeliharaan Sasis dan pemindah Tenaga Kendaraan Ringan Berbasis Adobe Flash Untuk Siswa kelas XI Kompetensi Keahlian Teknik Kendaraan Ringan SMK Negeri 2 Medan.* Skripsi. Fakultas Teknik Universitas Negeri Medan. 2020.

Penelitian pengembangan ini bertujuan untuk (1) mengembangkan media pembelajaran berbasis multimedia interaktif untuk SMK kelas XI Teknik Kendaraan Ringan pada kompetensi dasar Pemeliharaan Sasis dan Pemindah Tenaga Kendaraan Ringan, (2) mengetahui penilaian ahli materi dan ahli media terhadap media pembelajaran, dan (3) mengetahui kelayakan media pembelajaran berdasarkan penilaian ahli materi, media dan hasil belajar siswa.

Metode yang digunakan pada penelitian ini adalah penelitian pengembangan (*Research and Development*). Penelitian ini dilakukan di SMK Negeri 2 Medan. Metode yang digunakan dalam pengumpulan data yaitu angket.

Hasil penelitian dan pengembangan: (1) Proses penelitian pengembangan ini dilaksanakan dengan beberapa tahapan yang diadaptasi dari model penelitian pengembangan *four-D*. Adapun tahapan tersebut yaitu: *Define, Design, Develop, Disseminate*. Tahap *Define* meliputi analisis kebutuhan. Tahap *Design* meliputi tahap desain produk yang dikembangkan. Tahap *Develop* meliputi kegiatan untuk memvalidasi atau menilai kelayakan rancangan produk dan kegiatan uji coba rancangan produk. Tahap *Disseminate* meliputi kegiatan mengempletasikan pada sasaran sesungguhnya. (2) Hasil penilaian ahli materi pada aspek tujuan pembelajaran mendapat rerata skor 4,33 dengan kategori Sangat Layak, aspek materi mendapat rerata skor 4,25 dengan kategori Sangat Layak, aspek konten materi mendapat rerata skor 4,26 dengan kategori Sangat Layak, dan aspek self evaluation mendapat rerata skor 4,16 dengan kategori Sangat Layak. Hasil penilaian ahli media pada aspek manfaat media mendapat rerata skor 3,83 dengan kategori Sangat Layak, aspek desain media mendapat rerata skor 3,76 dengan kategori Sangat Layak, dan aspek navigasi/pengoperasian media mendapat rerata skor 3,9 dengan kategori Sangat Layak. (3) Hasil uji coba terhadap siswa dengan pre tes dan post tes untuk hasil belajar mendapat persentase dari 15,15% menjadi 75,75% siswa yang nilai hasil belajar diatas KKM. (4) Kelayakan media pembelajaran berdasarkan ahli materi adalah 4,25 dengan kategori Sangat Layak, ahli media adalah 3,83 dengan kategori Sangat Layak. Dengan demikian, media pembelajaran berbasis *Adobe Flash* layak digunakan sebagai media pembelajaran untuk kelas XI TKR 2.

Kata Kunci: Media Pembelajaran, siswa kelas XI TKR 2, Pemeliharaan Sasis dan Pemindah Tenaga Kendaraan Ringan

## ABSTRACT

SAHATA PARDOMUAN SIMANJUNTAK, NIM: 5163322012.  
*Development of Learning Media for Chassis Maintenance and Light Vehicle Power Transfer Based on Adobe Flash for Class XI Students of Light Vehicle Engineering Skills Competency SMK Negeri 2 Medan.* Thesis. Faculty of Engineering. State University of Medan. 2020

This development research aims to (1) develop interactive multimedia-based learning media for class XI Vocational High Schools in Light Vehicle Engineering on the basic competencies of Chassis Maintenance and Light Vehicle Power Transfer, (2) find out the judgments of material experts and media experts on learning media, and (3) know the feasibility of learning media based on expert assessment of the material, media and student learning outcomes.

The method used in this research is research and development (*Research and Development*). This research was conducted at SMK Negeri 2 Medan. The method used in data collection is a questionnaire.

The result of research and development: (1) The research and development process was carried out in several stages which were adapted from the *four-D* development research model. The stages are: *Define, Design, Develop, Disseminate*. The *Define* stage includes a needs analysis. The *Design* stage includes the product design stage being developed. The *Develop* stage includes the activities to validate or assess the feasibility of product designs and product design trial activities. The *Disseminate* stage includes the actual target activity. (2) The results of the material expert's assessment on the aspect of learning objectives got a mean score of 4.33 in the Very Appropriate category, the material aspect received an average score of 4.25 in the Very Appropriate category, the material aspect of the content got an average score of 4.26 in the Very Appropriate category, and the self-evaluation aspect received a mean score of 4.16 in the Very Eligible category. The results of the media expert's assessment on the aspects of the benefits of the media got a mean score of 3.83 in the Very Appropriate category, the media design aspect received an average score of 3.76 in the Very Appropriate category, and the navigation / operating aspect of the media got an average score of 3.9 in the Very Appropriate category. (3) The results of trials on students with pre-test and post-test for learning outcomes got a percentage from 15.15% to 75.75% of students whose learning outcomes scores were above the KKM. (4) The feasibility of learning media based on material experts is 4.25 in the Very Appropriate category, Media Expert is 3.83 with the Very Appropriate category. Thus, learning media based on *Adobe Flash* is suitable for use as learning media for class XI TKR 2.

Keywords: Learning Media, students of class XI TKR 2, Maintenance of Chassis and Light Vehicle Power Transfer