

ABSTRAK

Riswandy Nainggolan, NIM 5173122018 (2023). *Pengembangan Modul Sistem Bahan Bakar Bensin Injeksi EFI (Electronic Fuel Injection) Pada Mata Pelajaran Pemeliharaan Mesin Kendaraan Ringan Untuk Kelas XI Di SMK N 1 Palipi*. Skripsi. Fakultas Teknik, Universitas Negeri Medan. 2023.

Penelitian ini bertujuan untuk membuat dan mengembangkan media pembelajaran berupa modul sistem bahan bakar bensin injeksi EFI (*Electronic Fuel Injection*) pada mata pelajaran sistem pemeliharaan mesin kendaraan ringan di SMK Negeri 1 palipi yang dapat digunakan untuk mendukung pembelajaran sehingga dapat membantu guru dalam penyampaian materi pembelajaran. Selain itu tujuan pengembangan media pembelajaran ini ialah untuk mengetahui kelayakan media pembelajaran dalam proses pembelajaran

Hasil dari penelitian ini adalah media pembelajaran berupa modul sistem bahan bakar bensin injeksi EFI (*Electronic Fuel Injection*), dengan persentase kelayakan: (1) tingkat kelayakan modul sistem bahan bakar bensin injeksi EFI (*Electronic Fuel Injection*) berdasarkan penilaian ahli materi; (2) tingkat kelayakan modul sistem bahan bakar bensin injeksi EFI (*Electronic Fuel Injection*) berdasarkan penilaian ahli media ; (3) tingkat kelayakan modul sistem bahan bakar bensin injeksi EFI (*Electronic Fuel Injection*) berdasarkan penilaian ahli desain pembelajaran; (4) respon siswa terhadap modul sistem bahan bakar bensin injeksi EFI (*Electronic Fuel Injection*). Sampel penelitian terdiri dari 30 peserta didik kelas XI TKR. Penelitian ini termasuk *Research and Development* menggunakan model 4D. Hasil penelitian yang diperoleh untuk kelayakan modul sistem bahan bakar bensin injeksi EFI (*Electronic Fuel Injection*).

Berdasarkan penilaian ahli media, ahli materi dan ahli desain pembelajaran didapatkan nilai rata-rata keseluruhan 3,3 dengan persentase kelayakan 84% yang terkategori sangat layak. Hasil penilaian respon siswa terhadap modul sistem bahan bakar bensin injeksi EFI (*Electronic Fuel Injection*) menunjukkan rata-rata keseluruhan 3,17 dengan persentase penilaian 79,33 yang terkategori sangat setuju

Kata kunci : Pengembangan, modul, EFI (*Electronic Fuel Injection*)

ABSTRACT

Riswandy Nainggolan, ID 5173122018 (2022). *Development of EFI (Electronic Fuel Injection) Gasoline Fuel Injection System Module for Light Vehicle Engine Maintenance Subjects For Class XI At Smk N 1 Palipi*. Thesis. Faculty of Engineering, University of Medan. 2022.

This study aims to create and develop learning media in the form of an EFI (Electronic Fuel Injection) gasoline injection fuel system module in the subject of light vehicle engine maintenance systems at SMK Negeri 1 Palipi which can be used to support learning so that it can assist teachers in delivering learning material. In addition, the purpose of developing this learning media is to determine the feasibility of learning media in the learning process

The results of this study are learning media in the form of an EFI (Electronic Fuel Injection) gasoline injection fuel system module, with a percentage of eligibility: (1) the feasibility level of the EFI (Electronic Fuel Injection) gasoline injection fuel system module based on the assessment of material experts; (2) the feasibility level of the EFI (Electronic Fuel Injection) gasoline injection fuel system module based on the assessment of media experts; (3) the feasibility level of the EFI (Electronic Fuel Injection) gasoline injection fuel system module based on the assessment of learning design experts; (4) student response to the EFI (Electronic Fuel Injection) gasoline injection fuel system module. The research sample consisted of 30 students of class XI TKR. This research includes Research and Development using the 4D model. The research results obtained for the feasibility of the EFI (Electronic Fuel Injection) gasoline injection fuel system module.

Based on the assessment of media experts, material experts and learning design experts, an overall average score of 3.3 was obtained with a feasibility percentage of 84% which was categorized as very feasible. The results of the assessment of student responses to the EFI (Electronic Fuel Injection) gasoline injection fuel system module showed an overall average of 3.17 with an assessment percentage of 79.33 which was categorized as strongly agree

Keywords: Development, module, EFI (Electronic Fuel Injection)

