ABSTRAK

Egia Prananta Pinem. NIM. 5193331003. Pengembangan Trainer Programmable Logic Controller (PLC) Sebagai Media Pembelajaran Pada Mata Pelajaran Instalasi Motor Listrik Jurusan Teknik Instalasi Tenaga Listrik di SMK Negeri 5 Medan.

Penelitian ini yang berjudul "Pengembangan Trainer Programmable Logic Controller (PLC) Sebagai Media Pembelajaran Pada Mata Pelajaran Instalasi Motor Listrik Jurusan Teknik Instalasi Tenaga Listrik di SMK Negeri 5 Medan". Yang mendasari sehingga dilakukan penelitian ini adalah tidak adanya media pembelajaran Programmable Logic Controller (PLC) pada mata pelajaran Instalasi Motor Listrik. Penelitian ini bertujuan untuk melakukan pengembangan terhadap media pembelajaran Programmable Logic Controller (PLC) pada mata pelajaran Instalasi Motor Listrik. Metode yang digunakan pada penelitian ini Research and Development (RnD), yang menggunakan model pengembagan ADDIE (Analysis, Design, Development, Implementasion, Evaluation), yang meliputi kegiatan Analisis kebutuhan, Observasi lapangan, perancangan produk, pengembangan produk, penerapan produk, dan evaluasi penerapan produk terhadap objek penelitian. Hasil dari penelitian ini adalah: (1) Pengembangan Media Pembelajaran Programmable Logic Controller (PLC) pada Mata Pelajaran Instalasi Motor Listrik. (2) Tingkat kelayakan Buku Panduan dan Jobsheet Programmable Logic Controller (PLC) menurut ahli materi memperoleh skor sebesar 95% dengan kategori “Sangat Layak”. (3) Tingkat kelayakan Media Pembelajaran Programmable Logic Controller (PLC) menurut ahli media memperoleh skor sebesar 98,3%. dengan kategori “Sangat Layak”. (4) Tingkat respon pengguna siswa memperoleh skor sebesar 98% dengan kategori “Sangat Layak”. Sehingga media pembelajaran Programmable Logic Controller sangat layak untuk digunakan pada mata pelajaran Instalasi Motor Listrik di SMK Negeri 5 Medan.

Kata kunci : Media Pembelajaran, model pengembangan ADDIE, Programmable Logic Controller, Instalasi Motor Listrik.

ABSTRACT

Egia Prananta Pinem. NIM. 5193331003. Development of Programmable Logic Controller (PLC) Trainer as Learning Media in Electric Motor Installation Subject, Electrical Power Installation Engineering Department at State Vocational High School 5 Medan.

This research is entitled " Development of Programmable Logic Controller (PLC) Trainer as Learning Media in Electric Motor Installation Subject, Electrical Power Installation Engineering Department at State Vocational High School 5 Medan ". The basis for this research being carried out was the absence of Programmable Logic Controller (PLC) learning media in the Electric Motor Installation subject. This research aims to develop Programmable Logic Controller (PLC) learning media in the Electric Motor Installation subject. The method used in this research is Research and Development (RnD), which uses the ADDIE (Analysis, Design, Development, Implementation, Evaluation) development model, which includes needs analysis activities, field observations, product design, product development, product application, and evaluation of product application to the research object. The results of this research are: (1) Development of Programmable Logic Controller (PLC) Learning Media in Electric Motor Installation Subjects. (2) The feasibility level of the Programmable Logic Controller (PLC) Handbook and Jobsheet according to material experts received a score of 95% in the "Very Eligible" category. (3) According to media experts, the feasibility level of Programmable Logic Controller (PLC) Learning Media received a score of 98.3%. with the "Very Decent" category. (4) The student user response rate obtained a score of 98% in the "Very Appropriate" category. So the Programmable Logic Controller learning media is very suitable for use in the Electric Motor Installation subject at SMK Negeri 5 Medan.

Keywords : *Learning Media, ADDIE development model, Programmable Logic Controller, Electric Motor Installation.*