

***Trainer Programmable Logic Controller (PLC) Siemens Logo! Sebagai
Media Pembelajaran pada Mata Kuliah Sistem Kendali Otomatis di
Program Studi Pendidikan Teknik Elektro Undiksha***

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ABSTRAK

Penelitian ini bertujuan untuk membuat *Trainer Programmable Logic Controller (PLC)* dengan menggunakan PLC Siemens Logo! dan diimplementasikan pada mata kuliah Sistem Kendali Otomatis untuk membantu proses pembelajaran di Program Studi Pendidikan Teknik Elektro Undiksha. Penelitian ini menggunakan metode penelitian *R&D (Reasearch and Development)*. Penelitian ini menggunakan teknik analisa statistik deskriptif persentase untuk mengolah data ahli isi, ahli media, dan uji coba lapangan. Penelitian ini menggunakan angket/kuisisioner sebagai instrumen dalam pengambilan data ahli isi, ahli media, dan peserta didik. Hasil penelitian diperoleh: Hasil uji ahli isi diperoleh persentase sebesar 93,18% dengan kualifikasi sangat layak, hasil uji ahli media diperoleh persentase sebesar 97,36% dengan kualifikasi sangat layak. Hasil uji coba kelompok kecil dengan 5 responden diperoleh persentase sebesar 100% dengan kategori sangat baik, dan hasil uji coba kelompok besar dengan 13 responden memperoleh persentase sebesar 100% dengan kategori sangat baik. Berdasarkan hasil penelitian, *Trainer Programmable Logic Controller (PLC) Siemens Logo!* Sebagai Media Pembelajaran layak digunakan dalam proses pembelajaran pada Mata Kuliah Sistem Kendali Otomatis di Program Studi Pendidikan Teknik Elektro Undiksha.

Kata Kunci: *Trainer, Programmable Logic Controller (PLC), Sistem Kendali Otomatis.*

***Siemens Logo Programmable Logic Controller (PLC) Trainer! As a Learning
Media in the Automatic Control System Course at Undiksha Electrical
Engineering Education Study Program***

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ABSTRACT

This study aims to create a Programmable Logic Controller (PLC) Trainer using Siemens Logo PLC! and implemented in the Automatic Control System course to assist the learning process in Undiksha's Electrical Engineering Education Study Program. This research uses the R&D (Research and Development) research method. This study uses a percentage descriptive statistical analysis technique to process data from content experts, media experts, and field trials. This study uses a questionnaire as an instrument in collecting data from content experts, media experts, and students. The results of the study were obtained: The results of the content expert test obtained a percentage of 93.18% with very feasible qualifications, the results of the media expert test obtained a percentage of 97.36% with very feasible qualifications. The results of small group trials with 5 respondents obtained a percentage of 100% with a very good category, and the results of large group trials with 13 respondents obtained a percentage of 100% with a very good category. Based on the results of the study, the Siemens Logo Programmable Logic Controller (PLC) Trainer as a Learning Media is suitable for use in the learning process in the Automatic Control System Course at the Undiksha Electrical Engineering Education Study Program.

Keywords: *Trainer, Programmable Logic Controller (PLC), Automatic Control System.*