Design and Build Training Units of electrical power factor correction

by Taruno DLB., Ali M., Sukisno T., and Putra YU.

ABSTRACT

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Taruno DLB., Ali M., Sukisno T., and Putra YU. Design and Build Training Units of electrical power factor correction. Faculty of Engineering. Yogyakarta State University. 20203.

This study aims to: (1) obtain training module units along with their instructions as learning/training media. Media unit training modules and/or virtual simulators are expected to improve the quality of effective and efficient learning/training activities for industrial electrical installations. (2) Knowing how to develop an Industrial electrical installation training unit in the form of hardware that prioritizes the achievement of improving student learning outcomes in vocational education. (3) Knowing how to develop a lighting electric installation simulator in vocational education learning has an effect on student learning outcomes.

This study uses the ADDIE model and research and development (R&D) model which has five stages, namely: (1) Analysis, (2) Design, (3) Development, (4) Implementation, (5) Evaluation. The research subjects were D4 students, Department of Electrical Engineering Education, Faculty of Engineering, Yogyakarta State University.

Research results: (1) produce media application products for training module units and or virtual simulators. (2) The feasibility of the application program is reviewed from an assessment by a material expert covering aspects of material content, learning aspects, and efficiency aspects. All aspects of the material feasibility assessment received a score of 94.5 and were categorized as "Very Eligible". The feasibility of the application program is reviewed from an assessment by media experts covering visual aspects, hardware aspects, usability aspects, and portability aspects. All aspects of the media feasibility assessment received an average score of 109.5 and were categorized as "Very Eligible. (3) And for user responses by students include learning aspects, visual aspects, hardware aspects, usability aspects, and portability aspects. All aspects of user response by students got an average score of 107.1 and were categorized as "Very Good".

Kata Kunci: *unit_training, power_factor_correction, Electrical_installation.*