

ABSTRACT

JOBSHEET CUBICLE MEDIUM VOLTAGE DEVELOPMENT TO IMPROVE STUDENT ACHIEVEMENT COLLEGE OF INDUSTRIAL ELECTRICAL INSTALLATION PRACTICE IN FACULTY OF ENGINEERING YOGYAKARTA STATE UNIVERSITY

By :

Alex Ward Sandria Jaya

07501241025

This research aimed to: (1) know the process of developing jobsheet, (2) determine the feasibility and (3) find out the effectiveness of jobsheet cubicle medium voltage (switchgear medium voltage 20 kV) have been made to support learning in subjects Industrial Electrical Installation Practice.

The method used in this study is the development of research and development methods. Collection data was done by using questionnaires and test questions. The techniques of data analysis was done by using descriptive analysis techniques, by analyzing quantitative data and then interpreted in a qualitative sense.

The results showed that: (1) the development of jobsheet done in four main stages to analyze needs, design and create jobsheet, test the feasibility and effectiveness testing of a jobsheet, (2) testing the feasibility of expert material obtained value 89.58% , media experts for 84%, small-scale testing of students obtained 85% and the value of large-scale testing of students obtained a value of 87%. Based on the percentage of the overall percentage of the value obtained by an average of 86.56% with the criteria of "very good" and concluded jobsheet cubicle medium voltage (switchgear medium voltage 20 kV) is fit for use for the learning process, and (3) effectiveness testing is done by comparing the posttest posttest experimental class with the results obtained control class t count value = 8.935, which is much larger than $t_{table} = 1.668$, at 0.05 significance level (5%), so it can be concluded, the use of jobsheet are developed effectively used to support learning in the course Industrial Electrical Installation Practice.

Keywords: research development, jobsheet, cubicle medium voltage