

THE EFFECT OF USING MEDIA PROTEUS SIMULATION SOFTWARE TOWARDS STUDENT ACHIEVEMENT LEARNING ON ELECTRONIC SUBJECT

ABSTRACT

Author : Yana Andri Ariyanto/ 07518241005
Advisor : Muhamad Ali, M.T/ 19741127 200003 1 005

This study aims to determine the differences between student achievement in the department of installation power electric TITL A and TITL B's classes of SMK 1 Sedayu by applying media proteus simulation software as learning medium on electronic subject.

The method which has been used in this research was experimental method with control group posttest design. The sample is X1 TITLB's class which a group using the media proteus simulation software and XI TITL A's class which was using conventional learning media. The variables of this research were a method using media proteus simulation software (experimental class) and method using conventional learning media (control class) as independent variables and the achievement of learning as the dependent variable. Data collection method was using test instrument. Data analysis in this research was using analysis of different t-test were done by SPSS 19 software application.

The results showed: 1) the test of differences learning result's average between experimental group and control group by using t-test is t count's value $> t$ table ($3,653 > 2,001$) and the significance value $0,001 < 0,05$, meaning that there were differences in performance improvement learning between experimental group and control group, 2) student learning result by using the media software proteus simulation is higher than the student learning result using conventional media. The average of experimental group learning results is 75, while the control group is 66.33. The differences of learning result's average in both groups reached 8.76 or 13.12%. Based on the minimal completeness criteria (KKM), the experimental group reached 80% of students passing, whereas for the control group reached 50%. The differences of both group rate graduation reached 30%, this statement show that learning by applying proteus media simulation software can improve student achievement on electronic subject.

Key words: learning media, learning result, proteus