

ABSTRACT

Learning resources on materials CAD / CAM system which is currently still limited, especially learning the SolidCAM software. SolidCAM software learning requires the active participation of the learner. So the media needs to be a means learners to participate more actively in the learning like E-learning. In IT Telkom, Use of E-learning as a media learning has been developed since 2009, but there are still many students who do not fully understand the benefits of using e-learning as an effective learning media. practical activities which emphasizes learning about the software is still only using conventional media such as learning modules and Slideshow.

This study was conducted to measure the effectiveness of e-learning instructional media compared with the conventional instructional media. were divided based on the treatment that is given to students studying media treatment of E-learning as a experiment class and treatment with conventional learning media as a control class. The research was done by conducting a pretest to students. Then implementing e-learning applications to some samples and compare them to the learning of students using conventional learning media. Once the implementation phase is done, then be evaluated by the posttest.

Based on the research, the obtained results shows normalized gain value using E-learning media is 0.603, which is higher than students who used conventional media is 0.505. Based on the obtained results by gender of the control class average posttest male participants was 71,4 and female participants was 69.33. While in the experimental class average posttest the female and male participants got same result that is 77.2. Then this study examined differences in student learning outcomes using media E-learning and using conventional media (f_1), differences in student learning outcomes based on genders male and female (f_2), and the interactions between Instructional media and genders towards learning outcomes(f_3). From the results of calculations using two-way analysis of variance, the results obtained F value is 0.128 for f_1 , f_2 is 0.478, and f_3 is 0.014. Where the value of f_{table} is 5.12 so based on f_{tab} , all H_0 is accepted. It can be concluded that there are differences in learning outcomes between students who use e-learning media and conventional media with gender male and female, that is the media E-learning is more effective than the conventional media to both male and female..

Keyword: Instructional Media, E-learning, Conventional, Learning Outcomes