

ABSTRACT

DEVELOPING HANDOUTS MEDIA LEARNING ON STUDENT CLASS XI OF DRAW WITH CAD SYSTEM STUDY IN MECHANICAL ENGINEERING MAJOR OF VOCATIONAL PUBLIC SCHOOL 2 WONOSARI

By:

Ibnu Anjar

NIM: 07503241019

The purpose of this research is to develop a media learning in the form of handouts, as a supporter on learning process of Draw with CAD System and to determine feasibility of the handouts that have been created for learning of Draw with CAD System.

Method used at this research is Research and Development (R&D). This research was conducted at Vocational Public School 2 Wonosari in class XI of mechanical engineering major with a few phases, there are (1) Identify the problem, (2) Product development process have two phases, there are material development phase and media of learning handouts development phase, (3) The first product, (4) Material and media development expert test, (5) Revision, (6) Trial product test, (7) Revision of the final product, and (8) The final product. The analysis data technique of this research is used questionnaire, it have purpose to determine feasibility of the handouts. The technique to analyze the data is used quantitative descriptive analysis technique which showed in score distribution and percentage to rating scale assessment category that have been determined.

The result of material development is the material substance of Draw with CAD System, there are the basic operation autoCAD, the way to arrange drawing space, drawing work, and drawing production and construction. The result of media development is handouts learning of Draw with CAD System, the specifications is to use the HVS 70 grams paper, A4 size, for the boundary edge (margin) on the top is 4 cm, 4 cm to the left, 3 cm to the bottom, 3 cm to the right, then use the Times Roman font and Calibri font with the height varies between 12 and 32, and a space used is 1.5. The result of handout's feasibility test of Draw with CAD System according to expert of media learning, is equal to 82.89 %. That result included into excellent category. The assessment of material expert is equal to 69 %. That result included into good category. The assessment of student is equal to 75.1 %. That result is also included into good category. So, based on result test of media learning expert, material expert, and trial test of the product, it showed that the handouts of Draw with CAD System is feasible to use as media learning on Draw with CAD System subject.