

DEVELOPING DIGITAL MEDIA LEARNING ON METAL MATERIALS SCIENCE COURSE OF SMK MUHAMMADIYAH PRAMBANAN

by:

NUGRAHA INDRA SAPUTRA
NIM. 06503241009

ABSTRACT

The purpose of this study was to determine the process of designing digital learning media using Microsoft Office PowerPoint software to support learning in material science at SMK Muhammadiyah Prambanan materials, as well as determine the feasibility of instructional media that created.

The method of this study is research and development approach. The research was done in SMK Muhammadiyah Prambanan, involved 28 students majoring in engineering mechanical as respondents. Data collection techniques in this study was using a questionnaire, pretest and posttest evaluation. The data obtained was quantitative data in the form of scores with a scale of 5 (range 1 to 5). Data analysis techniques was using quantitative descriptive analysis techniques to determine the feasibility of learning media.

The results of this research is learning media in the form of CD learning. Instructional media design process conducted several stages: (1) preliminary studies, including the field surveys, literature studies, and preparation of the initial product or a draft model, (2) development, include limited test and more extensive trials, (3) testing, include pretest, treatment and posttest. The results of the feasibility test are: (1) evaluation by experts of material produces a total average value is 4.63 with the criterion very well, (2) evaluation by expert learning media produces a total average value of 4.47 with the criterion very well, (3) evaluation in limited testing generated a total average value of 4.34 with the criterion very well, (4) evaluation on a wider trial resulted in a total average value of 4.18 with either criterion. To measure the effect on the application of learning media used the evaluation: (1) pretest produce a total average value of 6.02, (2) posttest generated a total average value of 8.14.

Key words: digital learning media, microsoft office powerpoint, materials science