DEVELOPMENT OF COMPUTER AIDED DRAFTING DESIGN (CADD) LEARNING MEDIA TO INCREASE LEARNING ACHIEVEMENT OF GRADE XI STUDENTS IN SMK MUHAMMADIYAH PRAMBANAN

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ABSTRACT

This study aimed to make CADD learning media, find video media feasibility, and understand effect of computer-aided learning media application on learning achievement of Grade XI Students of Vocational High School (SMK) of Muhammadiyah Prambanan.

This study is *research and development* conducted in SMK Muhammadiyah Prambanan, Department of Machine Engineering, Grade XI. The object was the development of computer-aided learning media. Analysis of learning application compared percentage of learning success rate of XI TBB students before and after using video media in SMK Muhammadiyah Prambanan.

The results are computer-aided media. Stages of media developments used were: a) observation, survey and interview; (b) analysis of need; (c) design of computer-aided learning media using *Microsoft Office and Power Point*; (d) Making model or *Story board* for computer-aided learning media; (e) validation of media by media expert and materials to draft by Inventor Systems; (f) first testing; (g) first stage revision; (h) second testing; (i) second stage revision; (j) test of application of learning media using computer-aided media in Grade XI TPB; (k) end products are computer-aided learning media. The computer-aided media were found feasible based on feasibility test according to expert of media with feasibility percentage of 85.11%, first testing with percentage of 83.99%, second testing with percentage of 84.37%. Tested computer-aided media could increase learning achievement of students. Learning result of students before using the media was 26.27% and after using the media was 91.12%. From the results of media tests, it can be concluded that the computer-aided media developed and found feasible could increase learning achievement of students.

Keywords: development of media, computer-aided learning media, learning achievement, CADD learning.