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ABSTRACT

The purpose of the research was to construct self learning package for Technical Mathematics 2 (MM 104) on "Belt and Gear Transmission" for first year vocational students and to find out it efficiency based on the criteria of 80/80.

Eight units of self learning package were used for this

experiment. The sample group was 30 first year vocational students of College of Industrial Technology, King Mongkut's Institute of Technology North Bangkok, in the academic year 1987. The sample group was chosen from five industrial trades, i.e. Electrical Mechanics, Machine Mechanics, Mechanical Drafting, Auto Mechanics and Industrial Plumping. The students studied the topic by themselves. After studying, they were immediately tested. After that data were collected and analyzed to find out the

effectiveness of the self learning package.

The result of this research indicated that the efficiency of this self learning package was 92.16/80.60 which was higher than the 80/80 criteria and the scores of the pre-test and the post-test showed statistically significant differences at the level of 0.05. Thus, it could be concluded that this self learning package had significantly improved the student's knowledge.