

Thesis	Meta – Analysis of Theses on Computer Assisted Instruction Faculty of Industrial Education King Mongkut’s Institute of Technology Ladkrabang
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ABSTRACT

The purpose of this study was to synthesize 59 theses on Computer Assisted Instruction of master degree graduates in Science Education, King Mongkut’s Institute of Technology Ladkrabang, during 1999 to December 2005. The research instrument was a research data collection form developed by the researcher.

The findings of the study were as follows:

1. Classifying by research characteristics of theses on Computer Assisted Instruction, In print characteristic, a large number of theses were in a master of science program in the area of science education in 2003. In the aspect of content, a large number of theses on Computer Assisted Instruction had only one independent variable which was studying by using computer assisted instruction, while the dependent variables were the efficiency of the computer assisted instruction and learning achievement of students. Besides, most of computer assisted instruction programs had been developed in the area of Science for Secondary Education. Classifying by research methodology, most of the studies had only one group sample with the sample size between 20 – 30 students which were selected by simple random sampling technique, and employed a Pre-Experimental Design. The research instrument was a learning achievement test. The quality of the computer assisted instruction program was examined by content matter experts and multimedia design experts, while the quality of the data collection instrument were the validity coefficient, the degree of difficulty, and the degree of discrimination with the average values between 0.73 – 1.00, 0.30 – 0.76, and 0.22 – 0.65 respectively. The mean score of

reliability coefficient was 0.79. Descriptive statistics employed were mean, standard deviation, and frequency (percentage). Statistics in analyzing data were t-test for Independent Samples, and t-test for Dependent Samples. The average of the efficiency of computer assisted instruction on process/output (E_1/E_2) = 82.13 / 82.39.

2. The averages of the effect size of the experiment employing Pre Experimental Designs, True Experimental Designs, and Quasi Experimental Designs were 2.92, 1.54 , and 0.91 respectively.