Phubate Louimsai 2014: The Development Model Web-based Instruction for Under Graduate Students. Doctor of Education (Educational Technology), Major Field:Educational Technology, Department of Educational Technology. Thesis Advisor:Associate Professor Narong Sompong, Ph.D. 179 pages.

The purposes of this research were: 1) To develop the web-based instruction for under graduate students 2) To validate consistency model of the web-based instruction by using confirmatory factor analysis with empirical data 3) To validate the efficiency and implementation of the web-based instruction for under graduate students. The samples were 220 teachers educational technology for confirmatory factor analysis, 30 undergraduate students who registered for web design: second semester of academic year 2009 for the validate the efficiency and implementation of the web-based instruction for under graduate students. The instruments used in this research were: 1) the development of model the web-based instruction for under graduate students. The instruments used in this research were: 1) the development of model the web-based instruction for the efficiency of model validation. The data was analyzed using percentage, mean, standard deviation, t-test, and confirmatory factor analysis.

The research results were: 1) the web-based instruction for under graduate students composed of the elements of the analysis, design, implementation, develop and evaluation 2) the result of efficiency validating was  $E_1/E_2 = 81.27/83.20$  which meet the criterion 3) the analysis of pre-test and post-test scores of the samples and post-test comparative of sample with control group showed a significant improvement of student at 0.05 level.

Student's signature

Thesis Advisor's signature