

Angkana Karanyathikul 2011: Adaptive Web - based Learning Model to Enhance Thinking Ability of Student Teachers. Doctor of Education (Educational Technology), Major Field: Educational Technology, Department of Educational Technology. Thesis Advisor: Associate Professor Surachai Prasertsaruay, M.Ed. 304 pages.

The purposes of this research were: 1) to develop Adaptive Web-based Learning model to enhance thinking ability of student teachers. 2) to study the usage of Adaptive Web-based instruction model to enhance thinking ability.

The population were 150 students from the faculty of Education Valaya Alongkorn Rajaphat University Under Royal Patronage, who registered The Design and Development of Computer Assisted Instruction course and 60 students were selected by simple random sampling as the sample group. They were divided into two groups, field independent learning style students and field dependent learning style students. The data were analyzed by using mean, standard deviation, and dependent samples t-test.

The research results revealed that:

1. The Adaptive Web-based Learning model to enhance thinking ability includes 6 steps as follows: 1) Analysis 2) Determination 3) Design and Creation 4) Learning 5) Evaluation 6) Backwardness. The adaptive web-based courseware encouraged field independent learning style and field dependent learning style. The activities included learning objective, content determination, learners preparation, adaptive learning activities and evaluation.

2. The analysis of pre-test and post-test scores and thinking ability scores indicated that students who participated in an adaptive web-based instruction showed statistically significant differences at .01 level. The students' satisfaction toward The adaptive web-based learning was at high level.

30 / May / 2011

Student's signature

Thesis Advisor's signature