

Yutsadee Phukwanmaung 2006: Effects of Teaching by Using Concept Mapping on Learning Achievement, Critical Thinking and Attitude Towards Science of Mathayomsuksa One Students in Chonlatarnwittaya School, Changwat Chumphon. Master of Education (Educational Research and Evaluation), Major Field: Educational Research and Evaluation, Department of Education. Thesis Advisor: Associate Professor Boonreang Kajornsin, Ph.D. 185 pages.

The purposes of this research were to study the effects of teaching by using concept mapping on learning achievement, critical thinking and attitude towards science of Mathayomsuksa one students. The sample were 34 Mathayomsuksa one students of the academic year 2006, selected by cluster random sampling. The instruments of this research were the lesson plans about concept mapping, achievement test, critical thinking test and attitude towards science. Mauchly's test of sphericity was used to investigate the relationships among achievement, critical thinking and attitude towards science. Multivariate analysis of variance with repeated measure was used to analyze the differences between pretest and posttest scores of those 3 variables.

The results of this research were 1) The achievement posttest scores after using concept mapping was different from pretest scores at .01 level of significant. The achievement posttest scores increased 68.94% from pretest. 2) The critical thinking posttest scores after using concept mapping was different from pretest scores at .01 level of significant. The critical thinking posttest scores increased 21.92 % from pretest. 3) The attitude towards science posttest scores after using concept mapping was different from pretest score at .01 level of significant. The attitude towards science posttest scores increased 10.20 % from pretest.

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Thesis Advisor's signature

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