

TITLE : The Development of Web-based Instruction by Using Inquiry Cycle and
Concept Map to Enhance Critical Thinking Skills for Undergraduate Students.

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ABSTRACT

The objectives of this research were to : 1) develop of Web-based instruction by using inquiry cycle and concept map to enhance critical thinking skills for undergraduate students effective based on Meguigans Ratio, 2) compare and finding the relationship of achievement score and critical thinking skills between control group (conventional instruction) and experimental group (developed Web-based instruction), and 3) study the satisfaction of students learned through developed Web-based instruction. The 50 samples were collected using Multi-stage sampling and divided into 25 experimental group from the first class and 25 control group from the third class. The research instruments were included with : Web-based instruction by using inquiry cycle and concept map to enhance critical thinking skills for undergraduate students, achievement test, critical thinking skills test and satisfaction questionnaires. The analytical statistics use were Hotelling's T^2 and Pearson Correlation.

The result of research were as follows: 1) Web-based instruction by using inquiry cycle with concept map was effective with 1.08 of Meguigans Ratio.2) The achievement and critical thinking skills of the experimental and the control group was different at .05 level of significant, and critical thinking skills were a positive relationship with achievement, and 3)The satisfaction of the students learn through Web-based instruction by using inquiry cycle and concept map to enhance critical thinking skills for undergraduate students was in high level ($\bar{X} = 3.92$, S.D. = 0.91)