

Thesis Title Teaching Upper Secondary School Mathematics on Sets
Through Remedial Computer-Assisted Instruction

Author Mr. Apichart Charuchart

M.Ed. Mathematics Education

Examining Committee

Asst. Prof. Benja Sot-Yom	Chairman
Assoc. Prof. Sunthon Chanakok	Member
Asst. Prof. Dr. Wirat Waiyakul	Member

Abstract

The objectives of this research were to study the mathematics learning outcomes on Sets of the upper secondary students received the remedial computer-assisted instruction and their learning behaviors. The subjects of this study were 33 Matayomsuksa 4 students at Uttaradit School who enrolled in mathematics 011 during the first semester of the academic year 1998. The random sampling was used to select the students from eight classes. The tools of this research were 9 traditional lesson plans, 3 remedial computer-assisted instructional plans, the achievement test on Sets and the record form for observing the students' behaviors.

As for the data collection, the researcher divided the contents into three units. Each unit was instructed by the researcher using the traditional lesson plans for 3 periods. After that the students used the computer-assisted instruction lesson for 1 period. The students started the lesson with the pre-test for each unit, and then they used the remedial lesson. After they finished the remedial lesson they took the post-test for that unit. The students took the achievement test after they had done with all three units. The data from the pre-test, the

post-test, achievement test and also the data from the observation form were analyzed by means of arithmetic means, standard deviation, coefficient of variation, percent and mode. The findings were as follows:

1. The students learning mathematics on Sets through the remedial computer-assisted instruction lesson had improved their learning process and passed the achievement test at the 50% criterion.
2. The students' learning behaviors, namely class attentiveness, class discipline and class interaction were well developed.