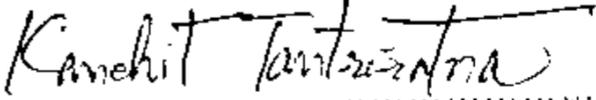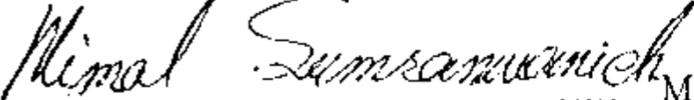THESIS TITLE : A COMPARATIVE STUDY OF MATHAYOM SUKSA I STUDENTS'
LEARNING ACHIEVEMENT AND SCIENCE PROCESS SKILLS IN
SCIENCE TOPIC OF " THE GREEN PLANET " BETWEEN
THE VEE HEURISTICS AND CONVENTIONAL TEACHING
METHODS.

AUTHOR : MR. MONGKOL SENAMONTRII

THESIS ADVISORY COMMITTEE :

.... Chairman

(Assistant Professor Kanchit Tantriratna)

.... Member

(Associate Professor Wimol Samranwanich)

ABSTRACT

The purpose of this experimental research was to compare learning achievement and science process skills of Matayom Suksa I (Grade 7) students between using Vee Heuristics and conventional teaching methods. The Pretest - Posttest Control Group Design was used in the study. The samples consisted of two classes of Matayom Suksa I students at Sri Boonruang Wittayakarn School in Sri Boonruang District, Nongbua Lamphoo Province. These two classes of students were randomly selected on the basis of their relatively equal grade point averages in the past semester. One class of 38 students was assigned experimental group and the other class of 43 students was assigned control group. The experimental group was taught by using the Vee Heuristics method, while the control group was taught by the conventional teaching method using the teacher's manual as prepared by the Institute for the Promotion of Teaching Science and Technology. The experiment lasted 7 weeks, 3 periods per week.

The tools used in the experiment included a criterion-based basic knowledge test with a reliability of 0.91, a learning achievement test with a reliability of 0.89 and

a science process skill test which was developed by Jareonsri Chomphoophol. A t-test was applied to the analysis of the data collected.

The findings showed that :

1. Learning achievement in science of the experimental group on the topic of " The Green Planet ", taught by applying the Vee Heuristics method, was significantly higher than the control group which was taught by using the Institute for the Promotion of Teaching Science and Technology ' s manual at the .05 level of significance.

2. Science process skill of the experimental group was significantly highly than the control group at the .05 level of significance.