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AT LOWER SECONDARY SCHOOL LEVEL

JITTIYA SRIYA: THE DEVELOPMENT OF A COMPUTER ASSISTED
INSTRUCTION ON MARINE ENVIRONMENTAL CONSERVATION FOR
STUDENTS AT LOWER SECONDARY SCHOOL LEVEL. THESIS ADVISORS:
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Ph.D., SURARSEE CHINGTIN, M.Ed., 166 p. ISBN974-04-1914-3.

The research objectives were to develop a course of computer-assisted instruction (CAI) on "Conservation of Marine Resources" issue, and to examine the quality of study and knowledge achievement of students who have taken the course constructed by researcher.

The research procedures were as follows:

1. Constructing and developing the course was done by a study of marine resources conservation, and the methodology of production of CAI from academic documents and related researches. After the CAI was constructed, it was examined by three experts before the experiment was performed.

2. The lessons of CAI were tried out firstly, with a group of three students. Secondly it was examined with nine students, and thirdly with a group of 30 students. All were level 2 students from Nawamarachanusorn school, Amphure Muang, Nakornnayok Province.

3. The developed course was tested with 30 students from Ban Thadan Amphur Nakornnayok Province in a control group, and 30 students from Ban Dongklang, Amphur Ongkarak, Nakornnayok Province in an experimental group.

Statistical analysis was done by computer with SPSS program; percentage, mean, standard deviation, and Paired-Sample t test were employed for comparison within groups, and Independent-Sample t test was used for comparison between groups.

The results were that the posttest scores of the experimental group were higher than their pretest scores, and also higher than the pretest and posttest scores of the control group at the statistically significant level of 0.05.

Therefore, it was recommended recommend that the course needs to be adjusted before using. The course should be split into modules based on the five main topics – the marine ecosystem, the boundaries of Thai maritime water, the importance of ocean resources, ocean tourism, and ocean resources conservation so that students can cover more details and appreciate the course more.