Thesis Title   Comparative Study on the Academic Achievements and Attitudes Toward Science Subject of Mathayomsuksa 1 Students on the topic, "Cell and Organelles" using Computer Assisted Instruction and Traditional Teaching Method.

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ABSTRACT

The purpose of this study were: 1) create a computer assisted instruction on the topic, "Cell and Organelles" which gained the 80/80 efficiency 2) compare the academic achievements before and after using of computer assisted instruction program 3) compare the academic achievements of the students who were taught with the use of computer assisted instruction program and traditional teaching method 4) compare the attitudes toward science subject before and after using of computer assisted instruction program and 5) compare the attitudes toward science subject of the students who were taught with the use of computer assisted instruction program and traditional teaching method. Samples were selected from Matthayomsuksa 1 students who were in the 1st semester of the academic year 2014 at Thawungwittayakarn school, Lop Buri province by the purposive sampling. Then, they were divided into 2 groups using simple random sampling. Names of these 72 students were drawn and put into 2 groups: 38 students in a control group and another 34 students in an experimental group. Tool of research in this study were the computer assisted instruction on the topic, "Cell and Organelles", lesson plans, an achievement test and a test on the attitudes toward science subject. The statistics used for data analysis were percentage, mean, standard deviation, pre-test, post-test, t-test and one way analysis of covariance.

Result of the study:

1. The efficiency of the computer assisted instruction on the topic, "Cell and Organelles" for Matthayomsuksa 1 students was 83.18/81.50.

2. The student's academic achievements after learning with the computer assisted instruction program were higher than before learning at level of significance .05.

3. Mean score of the academic achievements of the students who were taught with the use of computer assisted instruction program were higher than mean score of those who were taught in a traditional teaching method at a level of significance .05.

4. Mean score of attitudes toward science subject after learning with computer assisted instruction program were higher than before learning at level of significance .05.

5. Mean score of attitudes toward science subject of the students who were taught with the use of computer assisted instruction program were higher than mean score of those who were taught in a traditional teaching method at a level of significance .05.