Abstract

The purpose of the research was to produce software for computer assisted instruction in nuclear physics at university level. The researchers selected three lessons from nuclear physics at the undergraduate level and created data files for computer programs in nuclear physics. The three lessons were as follows: Radioactivity, Accelerator, Nuclear Reaction. The SHOW PARTNER F/X version 3.2 from Brightbill-Robert & Company Limited and Cu-Writer version 1.2 from Chulalongkorn University were used to create data files for computer programs.

The three nuclear physics lessons were saved in 5.25 inch floppy diskettes, one lesson on each floppy diskette. Students can study the lessons by using a 16 bit micro-computer with 640 KB RAM and two 5.25 inch floppy-disk drives by themselves.

In the three lessons (Radioactivity, Accelerator, and Nuclear Reaction), there were 26 monitor frames, 14 tests; 10 monitor frames, 10 tests; and 19 monitor frames, 10 tests, respectively, for display.

From the students' perceptions concerned with the interest of the lessons after they had studied, it was concluded that the lessons in computer programs were interesting; they were ranked at a good level and the mean score was the highest.