

ABSTRACT

Designing a computer programme according to " Touq's model " and its effect on achievement and retention of 6th Grade students in Science

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The purpose of this study was to investigate the effect of using a computer Programme according to "Touq's model" and to examine its effect on achievement and retention of science within the students of Grade Six.

The sample of the study consisted of (54) students – males and females – from Sixth grade – Abu Dis Coeducation school (UNRWA) – in the scholastic year 2007- 2008. It was picked intentionally.

The researcher assigned two study groups randomly which were the control and experiment group. The control group consisted of (19) male and (8) female students from 6th grade – section (A), and it's been taught in the traditional method. The experimental group was taught using computer Programme, and consisted of (19) male students and (8) females from 6th grade – section (B).

To achieve the objective of the study, the researcher collected information by using a multiple choice test of (40) questions. Students were given three tests pre test and post test and retention test. All tests were subjected to validity, reliability, and level of difficulty and discrimination measures. Also the researcher designed a computer programme according to " Touq's model ", and made sure it was suitable for the targeted group.

The Data were analyzed by using ANCOVA, the results showed tee following:-

There was a statistically significant difference at the level ($\alpha =0.05$) in achievement of science due to the method of teaching in favor the group which used the computer programme.

There was no statistically significant difference at the level ($\alpha =0.05$) in achievement of science due to the interaction between teaching method and gender, or the interaction between teaching method and the level of achievement and gender.

There was no statistically significant difference at the level ($\alpha = 0.05$) in students' retention of science due to the method of teaching.

There was no statistically significant difference at level the ($\alpha = 0.05$) in students' retention of science due to the interaction between teaching method and gender, or the interaction between teaching method and the level of achievement and gender.

Based on these results the researcher recommends the use of Touq's programme in teaching and. especially in teaching science, for the purpose of raising the level of students' achievement. And performing similar studies on other grades, and other units, with larger groups and samples and in several areas in order to generalize the results of this study.