Abstract

The Effect of Computers on the Direct Achievement and Retention of Basic Tenth Graders of the Unit of the Universe and its Main Components

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This study was designed to investigate the computer’s effect on the direct achievement and retention for the basic tenth grade students in the unit on “the universe and its main components”. The sample of the study was comprised of 91 students - 46 boys and 45 girls. These students were randomly divided into 2 groups: experimental (Male = 22, Female = 21), and control (Male = 24, Female = 24).

The study aimed to answer the following questions:
1- Does the way of teaching affect the direct achievement and retention ability of students?
2- Does gender affect the direct achievement and retention ability of students?
3- Does the interaction of the teaching method and gender affect the direct achievement and retention ability of students?
To answer the previous questions, ten hypotheses were formulated. A teaching program was prepared by the researcher to achieve the aims of the study. To achieve the aims of the study, the researcher taught the experimental group about the universe and its main components. There was also an achievement test for measuring the computer effect on the subject itself. The control group was taught using the traditional method.

The results revealed that there were significant differences ($\alpha=0.05$) in direct achievement attributed to teaching method (Mean experimental group = 19.17, Mean control group = 17.06). There were no significant differences between means scores in direct achievement, attributed to gender and interaction between gender and method. The results of this study investigated that the students who were taught with computer instruction in 10th grade showed significantly higher scores in retention achievement than student who were taught traditionally. Also there were significant differences ($\alpha =0.05$) in retention achievement attributed to gender, where boys scored higher than girls. Finally, the study revealed that there were no significant differences between mean scores in retention achievement attributed to interaction between method and gender.