

The Effect of Using Augmented Reality Technique in a Computer Course Unit on the Academic Achievement and Attitudes of High School Female Students

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Abstract : Title of the Study: The Effect of Using Augmented Reality Technique in a Computer Course Unit on the Academic Achievement and Attitudes of High School Female Students. This study aimed at identifying the effect of using the Augmented Reality technique on the academic achievement of computer course at the cognitive domains (Knowledge, comprehension and analysis) with third high school female students in Holy Makkah. The researcher used: The quasi-experimental approach. The sample of the study was comprised of (55) female students in the third high school level in Holy Makkah in the second semester of the academic year 1434/1435 H. These students were assigned to two groups: The experimental group of (28) students who were taught by using the Augmented Reality technology, and the control group of (27) students, who were taught by using the traditional method. The researcher prepared a set of tools and materials, which are represented in achievement test consisted of (30) clauses, direction instrument consisted of (25) clauses and the design of augmented reality for computer study unit. The study used the following statistical methods for data analysis: Cronbach's alpha coefficient, Pearson correlation coefficient, means, standard deviations, t-test and analysis of covariance test ANCOVA. The study reached the following results: 1- There are statistically significance difference at (0.05) among the adjusted means of the experimental and control groups in the posttest at the domains of (Knowledge, comprehension and analysis) of third high school graders after adjusting the pretest 2- There are statistically significance difference at (0.05) among the means of pre and post-test for female students of the experimental group in the scale of attitude towards using Augmented Reality Technique. In the light of the study results, the researcher recommends the followings: The necessity of using Augmented Reality Technique in teaching computer courses for high school students. Furthermore, emphasizing the need to provide schools with educational halls equipped with instruments and screens that enable teachers to use the Augmented Reality in teaching the other courses. Also, the researcher suggested conducting more studies in order to improve the process of teaching and learning.

Keywords : augmented reality technique, computer course unit, academic achievement, attitudes, high school female students

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