The Impact of a Strategy Based on The Knowledge Economy and Supported Electronically in Understanding The Scientific Concepts and the Development of Scientific Thinking Among 8th graders Students

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Abstract:

The study aimed to investigate the impact of a strategy based on the knowledge economy and electronically supported in understanding the scientific concepts and the development of scientific thinking among 8th graders students. The study was applied during the first semester of academic year (2018/2019), on purposeful sample consisted of (143) students selected from the population of the study in Directorate of South Hebron (4046) 8th Graders students. The study sample was divided into four groups in the two applied schools, two popular in each school, randomly assigned to the experimental group which studied a strategy based on the knowledge economy and supported electronically. The researcher adopted the experimental method and the semi-experimental design. The researcher prepared two study tools which consisted of the test of understanding the scientific concepts and the scientific thinking experiment. The validity and reliability of the tests were verified by the appropriate methods. The tools were applied to the experimental and control groups in both schools before and after treatment, Where the results were analyzed using the mean and standard deviations, and (ANCOVA).

The study concluded with a number of results:

There were statistically significant differences in understanding the scientific concepts among 8th graders students due to the variable of the teaching method in favor of the experimental group, and there were no statistically significant differences in understanding the scientific concepts among 8th graders students according to gender variables and the interaction between teaching method and gender.

The results showed that there were statistically significant differences in the development of scientific thinking among 8th graders students due to the variable of the teaching method for the experimental group and there were no statistically significant differences in the understanding of the scientific concepts among 8th graders students according to the gender variables and the interaction between teaching method and gender.

In light of these findings, the study recommends using teaching strategies based on the knowledge economy in teaching different subjects, using technological techniques in education, and incorporating them in school curricula, and conducting more studies on the subject.