The level of scientific thinking and learning styles of ninth grade students at the Hebron Educational Governorate

Abstract

This study aimed at exploring the level of scientific thinking and learning styles of students in the 9th grade at the Hebron Directorate of Basic Education.

This study was conducted during the second semester of the school year 2007/2008. The population of the study was composed of all students of 9th grade in the governmental and U.N schools in Hebron governorate, whose number is (2757) male students and (3144) female students, the sample of this study was selected according cluster random which was composed of (219) male students and (288) female students, the researcher used two instruments, the first one is scientific thinking test, and the second is the environmental learning styles. Validity and reliability of study instruments have been proved.

The researcher has used statistical methods represented in calculating means, percentages, standard deviations, using (t-test), (ANOVA), Least Significant Difference (LSD) for differences and Chi Square. after processing the data, the study has concluded that the students level for possession of scientific thinking was average, there were statistically significant differences in scientific thinking test due to gender in favor of the female students, and there were statistically significant differences in the scientific thinking test due to science achievement level in favor of the high-level students, the study has also concluded that there were statistically significant differences in learning styles among students due to science achievement level in favor of the low-level students in the imaginative style, and in favor of the middle-level students of executive style, and in favor of the high-level students of logical and practical style. The result have shown that there were statistically significant differences in scientific thinking test due to learning style among students, between the imaginative style and (logical and practical styles) in favor of the logical and practical types, and between (logical and imaginative styles) in favor of the imaginative style.

In light of the previous results, the researcher recommends that educators should take into account learning styles, and to employ scientific thinking skills strategies in the teaching of all subjects, particularly in science, and teachers should be trained up on how to use it.