The Reading Level of Chemical Concepts and its Relation to the Preferred Learning Pattern and the Ability to Represent the Scientific Concepts of 11th Graders

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Abstract:

This study aimed to determine the degree of reading level of the chemical concepts among the students of the eleventh grade scientific, and to reveal the relationship between the preferred learning style among students and their ability to represent the scientific concepts in chemistry and the detection of the reading style preferred by the students of the eleventh grade in chemistry from the schools of Jerusalem suburbs And Jerusalem.

To achieve these goals, the researcher used the descriptive method and three tools, the first test of understanding the chemical concepts of the students of the eleventh grade in chemistry, and consists of (30) questions, all in multiple choice, and the second questionnaire tool, which consists of (80) paragraphs To measure the preferred learning style, the third conceptual representation test to measure the reading level of chemical concepts consisting of (20) questions all in multiple choice format. It was applied to a random sample of (461) students from the same educational stage.

After the statistical analysis, it was found that the reading level of the chemical concepts in the 11th grade students in chemistry obtained 41.3% which is low. The results also showed that the non-verbal visual pattern came first followed by the auditory pattern, the verbal visual pattern and the spin pattern. The representation of scientific concepts among 11th grade students in chemistry was 63.95% which is a good percentage. The existence of a statistically significant relationship between the reading level of chemical concepts and the ability to represent scientific concepts, and the absence of a statistically significant relationship between the reading level of chemical concepts and the preferred learning pattern among students of the eleventh grade scientific.

At the end of the study, the researcher recommended several recommendations, most notably the adoption of the method of reading concepts in scientific materials based on the capabilities of students, and the adoption of reading the concept as a way to evaluate students and evaluate their understanding of the concept.