

Abstract

This study aimed at identifying the perspective of 9th grade students in the Ramalleh and Al-Bireh District to the constructive learning environment in science classes and its relation to the student's attitudes towards science. In specific, this study has attempted to answer the Following question:

First question: What are the perspectives of 9th grade students have towards to constructive learning environment in science classes?

Second question: Does the 9th grads student's perspectives different due to gender, level of achievement in science and to the supervising agency?

Third question: What are the student's attitudes towards science?

Fourth question: Does the 9th grade students attitudes different due to gender, level of achievement in science and to the supervising agency?

Fifth question: Is there a relationship between the students understanding to the constructive learning environment and their attitudes towards science?

To achieve the objectives of the study, the researcher designed two questionnaires; one of them was designed to measure the constructive learning environment.

The other one was designed to measure the student's attitudes towards science. The validity of the questionnaires was examined by exposing them to keen experts. The reliability of questionnaires was examined by applying it on hypothetical (Field) sample outside the study sample. The two instruments were applied on a chain sample consisted of (772) male and female students in the 9th grades studying in Ramalleh and Al-Bireh District. Descriptive statistic t-test and one way ANOVA, L.S.D. Pearson. Were used to analyze the results:

The study has revealed the following results:

The most important levels of the constructivist learning environment according to the grade students were (ordered in countdown):

A- Personal Relevance (3.72 mean).

B- Critical Voice (3.71 mean).

C- Student Negotiation (3.69 mean).

D- Shared Control (4.03 mean).

There were significant differences at ($\alpha=0.05$) in the means of the students understanding to the constructive learning environment attributed to sex and to the benefit of female.

There were significant differences at the ($\alpha=0.05$) in the means of the students understanding to the constructive learning environment attributed to the level of achievement and to the benefit of excellent.

There were significant differences at ($\alpha=0.05$) between the means of the students understanding to the constructive learning environment to the supervising Agency and to the benefit of governmental schools.

The attitude of the 9th grade students were (ordered in countdown):

A- Perception of The Science Teacher (3.58 mean).

B- Value of Science in Society (3.67 mean).

C- Self – Concept of Ability (3.38 mean).

D- Science Enjoy ment (3.37 mean).

E- Student Motivation in Science (3.59 mean).

There were significant differences of ($\alpha=0.05$) between the students attitudes means towards science attributed to sex and to the benefit of the males.

There were no significant differences at ($\alpha=0.05$) between the students attitudes means towards. Science attributed to the level of achievement and to the benefit to excellent.

There were no significant differences at ($\alpha=0.05$) between the students attitudes means towards science attributed to supervising agency and to the benefit of governmental schools.

There was significant positive a relationship between the students understanding to the learning environment and their attitudes towards science.

The study suggests that the Palestinian science curricula should consider the students' attitudes and the constructive learning environment in teaching science for the 9th grad students. The researcher also recommended that

more studies should be carried out to test the effectiveness of the constructive learning methods in promoting thinking skills and achievement in the different subjects in order to persuade the teachers to adopt the constructive learning methods. The researcher also proposed that the results of this study would benefit the teachers before and after employment to adopt the ideas of the constructive learning methods in developing the scientific thinking. Finally, it is recommended that educational leaflets could help science teachers in their teaching methods. Moreover, it is suggested that teachers can use the constructive learning in the real situations which challenge their thinking.