

Abstract

The effect of Teaching Thinking on The Ninth Grade Student's Academic Achievement and Attitudes Toward Science

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This study aimed at investigating the using of the first part of Cognitive Research Trust program (CoRT I) which is Breadth, on ninth grade students' academic achievement and attitudes toward learning science versus the effect of using traditional method in teaching the same subject.

The study sample consisted of 146 ninth grade female students selected from United Nation Relief And Work Agency For Palestine Refugees (UNRWA) schools in the Jerusalem area during the scholastic year 1999-2000.

The sample was distributed between two schools: Ama'ri Girls School, and Shu'fat Camp School, with two sections in each school. One was the experimental and the other was the control group randomly selected. Two science female teachers, taught the two sections in their respective schools. The study instruments that were used: worksheets representing the ten tools of the first part of CoRT program, which are: Plus, Minus, Interesting, and Considering All Factors, and Rules, and Consequence and Sequel, and Aims, Goals, Objectives, and planning, and First Important Priorities, and Alternatives, Possibilities, Choices, and Decisions, and Other People Views. The second instrument was the achievement test, and the third one was the attitude scale.

The reliability of the second instrument was 0.89. The reliability of the third one was measured in a previous study (Annajar, 1998). The study had 2 hypotheses.

One-way analysis of variance (ANOVA) was used to examine the effects of the treatment. The results showed that:

- Academic achievement was significantly higher in the experimental group.
- Students in the experimental group scored significantly higher on the attitude scale than the control group students.

Based on the results of this study, it is recommended that science teachers be encouraged to teach thinking for its effectiveness in improving students' academic achievement and attitude toward science.