Abstract

The main purpose of this study was to investigate grade nine students' attitudes to biology, their understanding of human nutrition and their alternative conceptions before and after they had been taught the topic using a cooperative learning strategy and the lecture method. The subjects were 156 grade nine students (84 females and 72 males) selected from two high schools in Jamaica. An attitudes to biology questionnaire adapted by the researcher and a 30 item multiple choice biology achievement test on human nutrition developed by the researcher were used for data collection. Results indicated that:

1) There was a statistically significant difference in the attitudes to biology questionnaire (ABQ) pretest and posttest scores of the control and experimental group students in favour of the experimental group.

2) The experimental group students performed significantly better on the BAT posttest than the control group students while there was no significant difference in the ABQ posttest scores of the two groups.

3) There was no statistically significant difference between the street science beliefs of the control and experimental group students in both the pre and posttests but the students' street science beliefs were found to be resistant to change even after they had been taught.

4) There was no significant difference in students' posttest understanding of human nutrition based on their treatment, gender and attitudes to biology.