Abstract

The study aimed to probe third and fourth year students’ understanding about the nature of Science in faculty of science in Palestinian Universities, and whether these conceptions were related to the variables (university, academic study, educational level, attending courses related to the nature of science). Participants were administered (Students Understanding of Science and Scientific Inquiry [SUSSI]) which consists of two parts: Likert-type multiple choice items, and open-ended questions which were used as an interview. The questionnaire consists of six fields (Observations and Inferences, Change of Scientific Theories, Scientific Laws vs. Theories, Social and Cultural embeddedness of science, Imagination and Creativity in Scientific Investigations, Methodology of Scientific Investigation).

A stratified random sample was selected to generate a sample of 191(20%) undergraduate students of the third and fourth year in Science faculties in three Palestinian universities (An-Najah university, Birziet and Al-Khalil).

The study results revealed that students held traditional views about the nature of science, So that the total mean of the aspects reached 3.21 which lies between (2.5- 3.5) in the area where students have no obvious views about the issue, these results come true with meeting results which revealed shortage of students’ understanding of nature of science. The results also revealed that Birziet university students showed better understanding of nature of science than An-Najah and Al-Khalil. In addition, there was also a relation between students’ understanding nature of science and attending courses about the issue. However there was no relation between students conceptions of the nature of science and both academic fields and educational level. It was recommended that professors should be encouraged to reconsider the educational policies and courses that arises in universities about nature of science.