2015 Vol.5 Issue 2, ISSN: 2223-4934 E and 2227-393X Print

Beyond Inquiry Based Science Program: It's Relevance in Changing Students' Stereotypical Images about Scientist

By

Sedat Karaçam

Düzce University Education Faculty Science Education Department, Düzce-Turkey

Abstract

This study aimed to investigate the influence of "Inquiry Based Science Program (IBSP)" on scientist image of 6th graders and the perceptions underlying these images. 29 students attending the 6th grade of a secondary school in Ankara participated in the study. However, data from 24 students were used in the study since 5 students could not complete the research. The program lasted 31 weeks during 2012-2013 academic year. Students' images about scientists were identified before and after the program implementation via DAST. Data obtained via DAST were analyzed through DAST-C. Results of analysis showed that IBSP did not change students' stereotypical scientist images but only increased their focus on technology symbols. Semi-structured interviews were given to determine the reasons why IBSP was unable to change students' stereotypical scientist images. Results obtained from semi-structured interviews pointed to the fact that since students i) believed that they "learned about" doing science instead of doing science, ii) arrived at known events, phenomena or concepts as a result of their research and iii) did qualitative research in social fields in their inquiries, they did not feel themselves as scientists and therefore their scientist images did not undergo transformations. These results point to the fact that the program in which the purpose is to teach science by using inquiries that involve qualitative research techniques has no influence on students' scientist images.

Keywords: Inquiry, Science Teaching Program, Scientist Image