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PRE-SERVICE CLASSROOM TEACHERS' SCIENTIFIC EPISTEMOLOGICAL BELIEFS AND ATTITUDES TOWARD SCIENCE

Abstract:

The purpose of this study is to examine pre-service classroom teachers' scientific epistemological beliefs and their attitudes towards science. Sample of the study consisted of 98 students pursuing their third year in primary teacher education department of Faculty of Education at Giresun University which is located at Northeastern part of Turkey. Data for the study was collected through the use of "Scientific Epistemological Beliefs Scale" and "Attitudes toward science scale". Scientific epistemological beliefs scale was developed by Elder (1999) and adapted into Turkish by Acat, Tüken & Karadağ (2010). Attitudes toward science were assessed by utilizing an attitude scale consisted of 34 items which was constructed by using items from various attitude scales. Data was analyzed through statistical techniques such as means, t-test and regression analysis. Findings of the study showed that pre-service classroom teachers' scientific epistemological beliefs differentiated for the dimensions of the scale from naive to sophisticated beliefs. There was not a significant difference between male and female pre-service teachers in terms of scientific epistemological beliefs and attitudes toward science. The results of the study also showed that there is a positive correlation between the scientific epistemological beliefs and attitudes towards science.

Keywords:

scientific epistemological beliefs, attitudes toward science, pre-service teachers

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