



THE COMPARISON OF THE SUCCESS OF PRE-SERVICE MATH AND SCIENCE TEACHERS REGARDING ASTRONOMY

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Abstract

The objective of this study was to find out the changes in pre-service Mathematics and Science teachers' achievements about the subjects of basic astronomy as a result of their teaching program, to compare these changes in terms of departments. For this purpose, the study was conducted with pre-service elementary school Mathematics and Science teachers studying their first and fourth years in the education faculty of a university chosen from the Black Sea region of Turkey. "Astronomy Achievement Test" which had 32 questions and which was tested for validity and reliability was used as data collection tool. T-test was used for the data analysis of independent samples in order to find out whether pre-service teachers' levels of achievement about the subjects of basic astronomy differed in terms of their department and their year of study. As a result of data analysis, although pre-service Mathematics and Science teachers started their undergraduate education at the same level in terms of basic astronomy, statistically significant difference was found in the achievements of pre-service Science teachers while no significant difference was found in pre-service Mathematics teachers. Thus, it was thought that it would be useful to add astronomy lesson to elementary school Mathematics teaching department curriculum and to increase the hours of 2-hour long astronomy lesson in the curriculum of Science teaching department. In addition, conducting various experimental studies to examine the efficiency of these was recommended to improve astronomy achievement of pre-service teachers.

Keywords: Astronomy, pre-service teacher, alternative concept.