

## THE SAME OBSERVATION - DIFFERENT INFERENCE: THE SAMPLE OF SEASONS

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### Abstract

This study was done in the purpose of determining on “whether science students know them in inferences as a result of observation, whether there are different implications in the same observation, whether they know the difference between observation and inference.” The working group consists of 33 students who received training at third grade of science teaching program in a state university in the region of Black Sea in spring term of 2015-2016 education-training year. The scientific process skills approach was used in the study. Students were asked to write down inferences that they made as a result of their observations as on activity page was given in the purpose of gathering data. In their activities, they were asked firstly to keep a ruler on a table in a vertical observation and to observe as keeping lantern house from different angles, and then to observe as keeping lantern on its own on table from vertical and different angles. It was determined from analysis of the obtained data that students would make inference as a result of observation, but the number of those who made inferences is a few. There were different inferences and also they did not know the difference between observation and inference.

**Keywords:** Observation, inference, science education, nature of science.