Effects of outdoor school ground lessons on students’ science process skills and scientific curiosity

Abstract

The purpose of this study was to investigate the effects of outdoor school ground lessons on Year Five students’ science process skills and scientific curiosity. A quasi-experimental design was employed in this study. The participants in the study were divided into two groups, one subjected to the experimental treatment, defined as “eco-hunt” group and the other had no experimental treatment, defined as control group. This study used intact four classes which consisted of 119 students and randomly assigned to the treatment (n = 63) and control groups (n = 56). Students’ science process skill was measured by a self-developed Science Process Skills Test and students’ scientific curiosity was measured using Children Scientific Curiosity Scale adapted from Harty and Beall (1984). The results showed a significant difference in post-test mean scores between students in “eco-hunt” group and control group in both students’ science process skills and scientific curiosity. Follow-up comparisons on the dimensions of science process skills and scientific curiosity were analyzed and discussed. The findings of this study will provide a framework for science teachers to teach students through interesting and meaningful outdoor activities.