

# Improvement in the study process on the moon and stars in the science class of junior high school and its evaluation

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In the new government guideline of science education of Japan, elementary school children will study motion of the moon and several constellations without understanding why the figure of the moon changes every night. On the other hand, junior high school students will observe the changing figures of Venus and study orbital motion of the Venus around the sun.

In order to raise curiosity and motivation for studying the astronomical phenomena for the reduced curriculum, we introduced small telescope for each children for observation of the moon. We also had star watch meetings twice or three times in a year including the watching bright artificial satellites, such as International Space Station, TRMM, Hubble Space Telescope.

We performed questionnaire on the astronomical phenomena for elementary school children in 2002 and 2005. The questionnaire in 2002 was for children without the observational activities. A comparison of the questionnaire between 2002 and 2005 has revealed that the improvements in study of the moon and stars are effective for raising children's curiosity and motivation in studying the astronomical phenomena.