

## SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

## Ignition - Primary Space Education (1)

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TO IGNITE THE PASSION IN CHILDREN'S HEARTS -ROLE AND EFFECT OF SPACE  
EDUCATION, ISSUES AND CONSIDERATION-**Abstract**

It is obvious that Space Education is very important for sustainable space development as children is going to bear new era of space development. Japan Aerospace Exploration Agency (hereafter called "JAXA") believes that all children hold 3 spirits which are "Curiosity", "Adventurous" and "Craftsmanship". We are trying to ignite children's these spirits toward the nature, life and the universe with the effective use of space subjects and materials since the establishment of JAXA Space Education Center in 2005. Studying about space is not limited to STEM, but can be applied to all subjects including social studies, music, and home economics. JAXA succeeded to coordinate more than 100 school classes in various subjects all over Japan in each year. In geography, students learned geographical feature of the mountain range from the images taken by JAXA's land observing satellite wearing 3D glasses so that they felt as if they were watching it from the space. In home economics, students discussed and came up with ideas for new space food menu considering nutrition and preservability. One of the idea has been selected as Japanese Space Food. Nowadays, the number of school collaborations are stable with various subjects. Therefore JAXA cooperated with SHINSEI elementary school as a model school of space education. This elementary school introduced space studies in all grade's education guideline in this school year. JAXA and SHINSEI elementary school are going to revise and analyze how students have been changed through this effort in March. We also focus on "Teacher's Training" by holding JAXA-Teachers seminars all over Japan and more than 1,000 teachers take this seminar every year. By studying questionnaire survey taken from teacher's seminars, it has been clarified that most of teachers realized space can be applied not only for astronomy but also in various subjects. They evaluate JAXA's effort for broadening their horizons. However most of teachers do not have enough time for investigating or preparing teaching materials as they have to put lots of effort to club activities held after school and weekends in Japan. It is necessary for JAXA to study and analyze more about present issues on educational field and to build effective infrastructure to spread space education based on demands. I believe that mysteries of space can stir up children's 3 spirits. It is our most important mission to motivate them via space education at their early stage of school life.