

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Lift Off - Secondary Space Education (2)

Author: Dr. Parshati Patel
Institute for Earth and Space Exploration, Western University, Canada

Prof. Isha DeCoito
Western University, Canada
Mr. Mohammed Estaiteyeh
Western University, Canada
Prof. Gordon Osinski
Centre for Planetary Science and Exploration(CPSX), Canada

SPACE EXPLORERS ACADEMY: A UNIQUE EXPERT LED OUTREACH PROGRAM TO ENGAGE
YOUTH IN SPACE!

Abstract

The Space Explorers Program at Western University's Institute for Earth and Space Exploration offers space science and technology themed camps for students in Grade 4-8 in London, Ontario, Canada. The week-long programming is offered during March Break and Summer while the one-day programming is offered throughout the school year. The program is intended to engage and train the next generation of space scientists and engineers while exposing them to various aspects of planetary science and space exploration.

The program launched in 2016 and since then, more than 800 students have participated in the program. A summer camp is offered to students in Grade 4/5/6 with two distinct themes every year that are offered on a weekly basis. The camp is mostly hands-on activities and experiential learning. The academy was launched in 2018 for students in Grade 7/8 (ages 12-14). Sessions are led by the faculty, postdoctoral fellows and graduate students in the Institute. Unlike camp, the academy is a blended program with a combination of presentations, hands-on activities, and inquiry-based and project-based learning. The academy was developed based on the feedback of the participants in the previous years, and to fill the gap by offering a unique opportunity to keen students to learn from experts in a university setting. The academy was offered once in 2018, twice in 2019 and will run once in 2020.

In order to understand the impact of the program and gauge participants' engagement in space science and technology and the program, the week-long programs have an extensive exit survey. The survey allows for the evaluation of activities, and critical assessment of the program. The survey data from 2018 has been analyzed while data from 2019 is currently being analyzed to get insights on various aspects of the program. For 2018, the results show that 81% of students said that the academy made them more interested in space science and technology. When asked if the academy made them want to have a career in this field, 48% of participants said it did, while 11% said it did not, and 41% were unsure. Several other questions were explored - overall, data from 2018 shows the program had a very positive impact on the participants. The data from 2019 is undergoing analysis and it will provide details on the topics that the participants would like to learn more about, and what they liked and disliked about the camp.