

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

Author: Dr. Kareen Borders  
University of Washington, United States, kareenborders@comcast.net

## INSPIRING THE NEXT GENERATION: LEADING WITH A TEACHER COHORT MODEL

**Abstract**

Space exploration is a launching pad for inspiring the next generation of explorers!

A multi-year, multi-sector teacher cohort utilized space exploration studies and connections with astronomers and researchers to catalyze interest in and application of space science at the secondary level. Students and teachers developed scenarios with embedded astronomical phenomena, connected with scientists and researchers in the field, and designed space exploration challenges. Qualitative and quantitative data indicates increased understanding of, application of, and engagement in space science by providing sustained teacher professional development and connection with researchers. By building upon previous teacher-researcher work, we elevated teacher space exploration research. Previous understandings included the electromagnetic spectrum through interactive stations, the use of ultraviolet beads to determine ultraviolet exposure, the study of lenticulars and diagramming of infrared data, looking at visible light through diffraction glasses and diagramming the data, protocols for using astronomy based research in the classroom, and infrared thermometers to compare environmental conditions around the observatory.