

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
New Worlds - Non-Traditional Space Education and Outreach (7)

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DEVELOPING A NOVEL SPACE CAMP MODEL TO INSPIRE THE NEXT GENERATION OF  
SPACE PROFESSIONALS

**Abstract**

Education, one of the pillars of the Ecuadorian Space Program, is the platform where the wonders of space exploration are shared with the younger generations. A Space Camp experience is proposed in collaboration with IAF members: the Ecuadorian Civilian Space Agency (EXA) and the Sideralis Foundation. This initiative looks to create an environment where children and teenagers are shown that technology and space exploration is within their reach and is something that can be achieved in the country and the region. The objective is to inspire young Ecuadorians to pursue careers in STEM and develop potential EXA members. The project plans to re-invent the Space Camp taking inspiration from the Summit Model (developed by Summit Public Schools, California), the Scout Movement, and an Engineering Curriculum. “The Science of Summit” strives to develop Cognitive Skills, Content Knowledge, Habits of Success, and a Sense of Purpose in every participant. The Engineering curriculum will provide highly technical aerospace, robotics, and programming project-based experiences. The Scout Movement will provide structure, camp culture, and outdoor life. This combination, along with the mentorship from highly qualified engineers and pedagogy professionals, will create a unique Space Camp experience. Amid the ongoing pandemic, a pilot virtual camp will be trialed in the Summer of 2021. A presential version will be executed in Ecuador in 2022, and if successful it is to be replicated in other countries in the Latin American region in partnership with IAF GRULAC member organizations. Impact of the virtual program will also be analyzed to determine the viability of hosting a virtual camp each year, reaching more children in Latin America and around the globe. The educational concept and curriculum have been tested with the preparation of pilot activities and sample projects. This paper will provide a detailed description of the proposed innovative Space Camp model. It will cover its structure, curriculum, project timeline, and projected outcomes. Results, pictures, and data acquired from the virtual pilot camp, including activities and projects will be shared with the broader space community during IAC2021 in Dubai. Execution of the presential camp is to be shared during IAC2022 in Paris.