

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

Ignition - Primary Space Education (1)

Author: Mr. Luis Monge

Central American Association for Aeronautics and Space (ACAE), Costa Rica

Mr. Carlos Alvarado Briceño

Central American Association for Aeronautics and Space (ACAE), Costa Rica

Ms. Mariela Rojas Quesada

Universidad de Costa Rica, Costa Rica

PROMOTING STEM IN PRIMARY SCHOOLS THE CASE OF SUPERNOVAS SPACE EDUCATION
PROGRAM IN CENTRAL AMERICA.**Abstract**

The Central America Association for Aeronautics and Space ACAE promotes research and development projects in space-related technology to orient future generations towards science and technology development. The Supernovas Education Program, is a modular education experience for primary school children developed together by ACAE and American Education Program AEP, and initially launched in Costa Rica and Honduras. In this program children familiarize themselves with basic space concepts from a multidisciplinary, system focused approach. Space knowledge far from being a goal itself, seeks to be a pretext to learn about the interaction of scientific knowledge and technology, how from this interaction engineering principles emerge, and finally how all these disciplines share the common language of mathematics. Through each of the programs modules children develop a grasp of Space science and learn engineering concepts. The program is hands-on in which means children learn by doing. At each session after a quick multimedia theoretical briefing, the children proceed to develop the sessions a "space mission" in which they develop an experiment that illustrates principles related to topics ranging from astronomy and physics to basic robotics and rocketry. Learning through exploration is at the core of Supernova philosophy, taking advantage of Space as humanity's final frontier to appeal to the explorer in every child, to introduce them through creativity and innovation into the world of science and technology.