

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

Lift Off - Secondary Space Education (2)

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EEE+14 SPACE EDUCATION PROGRAM – A SUCCESS STORY OF EDUCATIONAL INNOVATION IN COLOMBIA

Abstract

INTRODUCTION

One of basic premises to equal opportunity in a society is the access to high-quality education. The educational projects in sciences are some of the forceful tools to promote the scientific and technological culture, supported in the new communication ways to divulge, share and reinforce the progress, development and experiences.

The Astronautics Colombian Association – Astcol has created the Space Education Program EEE+14, in which high-school students from academic institutions around the country carry out the analysis, design, elaboration, test and launching of a experimental solid fuel space rocket with a useful charge to measure the atmospheric components required to reach a high point of 1000 meters, causing a great academic, pedagogical, ludic, intellectual, and social impact.

PURPOSE

To give to students in scholar age a solid formation in science concepts, technological and scientific thinking, providing the spaces for the developing and participation in projects related to aerospace science, for the promotion of the investigation, teamwork and fair contest.

METHODOLOGY

In order to generate among the participants the atmosphere of academic project with entrepreneurial nuance, the used methodology was SPACE MANAGEMENT (applied by ESA), strengthening teamwork, creation of leaders, and use of the Information and Communication Technologies.

RESULTS

In the first version of the project, named PIONEERS EEE+14, the results surpassed the brought-up goals, being the technical results over the expected, 1100 meters (100 more that planned), significant optimization of every subsystems (redundant systems, electronic instrumentation and recovery systems), and had a positive impact to students, teachers, staff members, parents and members of the Association

all around the country, having an attendance of about 2500 persons during the launching, being broadcast by the local and national media (radio, newspaper, Tv, internet)

CONCLUSIONS

- During the project development, we found a proactive attitude in more than 90
- Colombia has a great human, intellectual and technician resource, but not much recognition. The proof of it is that there is an important number of nationals working and leading processes in space agencies and related companies in the 5 continents.
- However, the most important, is the notable interest of all that directly and indirectly got involved. This shows -in the near future-, the possibility of a growth in investment, technology, infrastructure and human resource for the sector.