SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)

Innovative and Informal Space Education (4)

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AN EXAMPLE OF GOOD PRACTICE: COLLABORATION TO BRING INFORMAL SPACE EDUCATION IN THE CLASSROOM

Abstract

It is already well known that many countries are experiencing a fall in the uptake by students of subjects, such as sciences and engineering. If the space industry is to have access to qualified scientists and engineers in the future, it is essential to promote these subjects and to encourage students to consider careers in this field and for those who would choose other careers related to science and technology. We live in a world where developments in this area have a profound effect on our lives and the society we live in and to form an opinion we need to have at least some understanding of what they are. At the European Space Agency, the Directorate of Human Spaceflight (HSF) has taken on board the value of working together with various key players to reach children at an early age to get them hooked onto science. The HSF Education team has developed and distributed a wide range of educational materials for use in European schools. These are produced in the form of printed materials, DVD's, web-based materials, active participation in competitions based on space missions, and an interactive education tool called Space Flight Challenger 1. The astronauts who live and work in the unique microgravity environment on board the International Space Station (ISS) are also seen as ambassadors of their respective countries. Their missions serve as an incredible opportunity to demonstrate many physical and biological phenomenon's that can take the student out of their classroom laboratory into the space environment. This thematic approach where human spaceflight and the International Space Station are used in the pedagogical cycle is, by its very nature, exciting and inspiring for students in the classroom. Combine this with questions based around the curricula then you have a complete cycle where learning also becomes fun.