

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Interactive Presentations - IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (IP)

Author: Mrs. Doreen Hagemeister  
Italian Space Agency (ASI), Italy

Dr. Germana Galoforo  
Italian Space Agency (ASI), Italy

SPACE EDUCATION: THE ITALIAN SCHOOL-WORK ALTERNATION PROJECT - LEARNING BY  
DOING

**Abstract**

The Italian Space Agency (ASI) offers educational programs to support and encourage the development of a European society that is increasingly knowledge-based, "inspiring" and motivating young people. The goal is twofold: to improve the skills of young people in the field of STEM including associated applications, and attract the best talent into technical and scientific careers. At the same time these programs increase, among young people, awareness of the importance of space to society and the modern economy, and the institutions that promote it. The School-Work Alternation Project of the Italian School System, strongly supported by the recent National School Reform, is the most recent of the educational activities of ASI. The Italian Legislation (Moratti Reform of 2003 and Law 107/2015 "Reform of the national education and training system and act for reorganizing the laws") introduces an important innovation: The project of alternation between school and work becomes mandatory for all pupils in the last three years of upper secondary schools. The Reform enhances the know-how and practical experience as necessary elements in the paths of compulsory education. These paths are an excellent opportunity for inclusive education, offering pupils the unusual opportunity to experiment in the workplace, thereby improving their motivation to learn through the logic of "learning by doing". In this context, ASI, as part of its education activities, started in 2015 a school-work path aimed at secondary schools on the national territory with ad hoc agreements and training programs. The School-Work Alternation is set up as a teaching method capable of implementing mode of flexible and equivalent learning to connect classroom training with practical experience, promoting both the orientation of the student both organic links between school and the workplace, even with mobility in Europe. The method in question also makes it possible to develop in young people skills (soft skills) employable in the labor market. ASI experts set up a program to offer a unique opportunity to the pupils to experiment the Space reality, inside the ASI facilities, getting in touch with experts of different Space fields and performing themselves space activities, e.g. GPS and GIS in the Space Geodesy Center of Matera, but also to be followed during the whole year by experts in their educational path related to Earth Observation and Space. The final goal of the program is to illustrate the main aspects involved in the conception, design and operation of a space project.