

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
TO BOLDLY GO - SPACE STATION EDUCATION AND OUTREACH (5)

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A SPACESHIP, ASTRONAUTS AND CHILDREN: HOW THE EUROPEAN SPACE AGENCY BRINGS  
THEM TOGETHER IN THE CLASSROOM.

**Abstract**

The International Space Station has been orbiting Earth since 1998. During this time, it has been recognised by all Space Agencies what an incredible source of inspiration and curiosity this can be to the next generation of young scientists and engineers. In order to maintain this interest for scientific and technical disciplines the HSF Directorate sets in place numerous educational projects around European astronauts' long-term missions.

In a first section this paper will present the education activities carried out during astronaut Frank de Winne's 6-month mission from May to November 2009. It will follow the journey of Frank a year before his mission when he participated in an interview with ten young children from the Delta Researcher School Project at the European Space Agency's ESTEC (European Space Research and technology Centre) to talk about what it is like in space and his upcoming six month mission. How his role as goodwill ambassador of Belgium UNICEF led to development of lessons to enhance the importance of water both on Earth and in Space; Inspiring live events linking various European countries with the crew of the Space Station where children followed his demonstrations live and were able to ask questions. These are just some of the educational activities highlighting how significant the astronauts are as role models for the next generation.

In a second part, this paper will focus on the education programme developed in view of the upcoming mission of Paolo Nespole scheduled to begin in December 2010. More ambitious education payloads are being developed so as many more activities using already onboard hardware. A series of recorded lessons from space along with still pictures of Earth observations will also be produced.

From the lessons learnt and acquired experience of these two programmes leads of possible future projects for upcoming European astronauts' missions will be identified. Finally the paper will give an overview of the tangible and intangible results of such education programmes highlighting the impact of some of these initiatives. The ISS provides this amazing dimension children have only seen in science fiction movies: weightlessness – astronauts floating, no up or down, puffy face syndrome and chicken legs. Discover how the European Space Agency brings space ships, astronauts and children together in the classroom.