

National Space Centre/ Space Academy partnership presentation at Space Center Houston Feb 2009

Context

The annual Space Exploration Educators Conference, supported by NASA and Boeing, is an annual event hosted by Johnson Space Center and its visitor centre, Space Center Houston. Drawing an audience of 600 educators and representatives from the space industry with an interest in STEM education, this event is the largest space education conference in the world. It includes presentations from education teams from most of the NASA centres and an annual delegation of administrators and educators from JAXA and CSA.

Presentation

The Space Academy presentations used the context of ESA's Rosetta mission to rendezvous with, and land on, Comet Churyumov- Gerasimenko. This was the basis of educator workshops highlighting ways in which this mission could be used to teach various high school (A level and GCSE) physics and chemistry concepts. Dr Simeon Barber, OU Project Manager for the Ptolemy instrument on Philae (the comet lander) was also involved in preparation briefings for the conference.

Delivery was by the Space Academy Project Director, Anu Ojha, along with two of the Space Academy's seconded teachers – Judith Green and Steve Althorpe. Both Judith and Anu have been assessed as “Advanced Skills Teachers” – having passed national assessment for excellence in teaching. Steve is Head of Science at Robert Smyth School (an STFC/SSAT “Leading Space School”) in Market Harborough where Judith teaches also. Dr Simon Roberts, a Space Academy research scientist at the University of Nottingham, also accompanied the group.

In addition to the teaching theme, overviews of ESA and Space Education in the UK were given. The Director of NAROM, the Norwegian Centre for Space-Related Education (which is hosting Norway's ESERO office), is on a five-month sabbatical at the University of Leicester and at the National Space Centre – an overview of Space Education in Norway was also included.

Finally, the roles of EADS Astrium, in relation to both the Rosetta mission and the ExoMars mission, were highlighted and various Astrium resources were distributed to attendees.

The UK presentations were (apart from keynote sessions) the largest in the conference. The first presentation was the conference opening one on Thursday 5th February and attracted 50 attendees. The second session had an audience of over 70, including personnel from NASA Headquarters.

Impact

Both sessions were very well received. Rice University in Houston have requested to incorporate the presentation material into their science educator programmes from April 2009 and the Space Academy Project Director has been invited to present a Space Academy session to science educators in Maryland.

Beyond the formal workshops there was tremendous interest in both the European space programme and also the Space Academy project itself, as a strategic methodology designed to support National initiatives in STEM education and working simultaneously with students, educators and industry.

Details of the Space Academy project have been passed to NASA's Office of Education and the Sciences Mission Directorate by the Agency's Assistant Education Program Manager for Space Operations who attended the second UK session.

