Abstract
In this poster the author gives an overview of the educational activities in the UK that can be used as case studies for planned activities for the International Year of Astronomy 2009. Activities and events in schools, teacher training centres, museums and science centres, have been provided and the knock-on effects of this level of engagement are described with encouraging results from the participation of hard to reach audiences in deprived communities.

Introduction
Each of the four UK nations has its own unique curriculum. All regions share similarities and exhibit differences in the way that science is taught in each area. The introduction of a newly revised science syllabus this year saw the addition of a large amount of astronomical based content into the national syllabus with the emphasis on using astrophysical topics in How Science Works, and Astronomy and Industry based themes. Secondary schools also have the opportunity to include GCSE Astronomy as an option for study for the first time.

Discussion
The large shift introduced by placing astronomy on the UK’s regional national curricula in a relatively short space of time, has meant that teachers unfamiliar with astronomy are desperate to find materials and textbook sources to teach the subject. To support these changes and to guide teachers and pupils in the right direction for information on educational programmes and associated learning materials, the UK has sought to create its first set of space and astronomy education offices. In October 2006 the Northern Ireland Space Education office (NISO)\(^1\), based at the Armagh Planetarium\(^2\), opened as one of the first science centres to have actively influenced a curriculum directly, with astronomy and space science to be presented in schools as from September 2008. NISO aims to build on the interest and enthusiasm of teachers already involved in astronomy and space science projects by developing resources to support all teachers in aligning the potential offered by developing technologies to the requirements of the revised Northern Ireland Curriculum. The resulting resources, support materials and thematic units created by NISO for the new curriculum will use the context of astronomy and space science to relate science, technology, engineering and mathematics (STEM) to real life.

Events and activities for IYA2009
The activities target audiences that would not normally have had the opportunity to participate in astronomy education-related and communication outreach events. Attempts to provide activities

\(^1\) http://spaceconnections.net
\(^2\) http://armagplantarium.com
for all members of the community; from schools, science learning centres and science centres to community groups will have the knock-on effect of engaging the family members of the school pupils involved and getting them to join in the events through working with local community leaders.

Activities include:

- Children’s Master classes and teacher training workshops to incorporate hands-on learning activities for pupils from the ages of 5 to 16.
- Class twinning and e-twinning through messaging software such as Skype, MSN and the Xplora portal community chatroom features.
- A planned stage show to be performed at concert arena venues for IYA2009. The Stage Show will be a two year event starting with workshop activities taken into schools where the stage show will be created by the pupils themselves. Pupils will then learn how to create a stage production from scratch accompanied by educational activities incorporating the science curriculum set in a cross-curricula interdisciplinary theme.
- Creation of cartoons, planetarium movies, and animations, all done by children and community members attending the workshops.
- Role Play, Theatre and Dance Workshops fusing creative media, music and street dance with traditional aspects of astronomy.
- A One-Stop Shop of Astronomy Education resources with a built-in virtual learning environment and repository for multimedia teaching materials and resources.

Astronomy related resources to support communication and outreach

- Creation of a CD-ROM and DVD of teaching materials and multimedia resources for Primary and Secondary Schools.
- Implementation of a new national programme to support both primary and secondary teachers in providing regional in-house training (INSET), workshops for specific subject areas and recognised accreditation to count towards their Career Professional Development.
- Provision of teaching materials and resources encouraging cross-curricula aspects embracing creative learning.
- Extension of the current Teacher/Scientist Network.

Looking towards IYA2009

Cosmos Media³ is preparing a journal in collaboration with the Association for Astronomy Education to support astronomy education in the UK. The ASE is an education publisher, producing textbooks and resources on behalf of organisations and offering these for purchase through the ASE bookshop. The newly-launched Astronomy Education and Outreach Resource Centre operated from the SETPOINT⁴ office in greater Manchester in partnership with the University of Salford and the University of Manchester will act as a drop-in centre for teachers, learners, science communicators and local businesses.

The programme has been successfully piloted to a number of schools across the North West region with a total of over 500 schools to date participating in the teacher training and pupil hands-on activities.

³ http://www.cosmosmagazine.tv
⁴ http://www.stemsalford.org