

## Developing space as a cross curricular theme and a context to engage the wider community - Kennet School

### Leading Space Education - the first year at Kennet

Leading Space Education is about using the expertise of the UK space programme to educate and inspire the citizens of the future. Those citizens could be scientists, engineers, key decision-makers or space technology users - very few UK citizens today are untouched by the benefits of space technology. The UK involvement in space is one of our best-kept secrets and it shouldn't be - it's the biggest employer of STEM graduates at the present time, and the UK is amongst the world leaders in the use of unmanned space technology for the direct benefit of all the Earth's residents, not just the human ones!

The students at Kennet School have benefitted greatly from year 1 of the school's Leading Space Education status, and there's plenty more to come in year 2 for the young people of the Thatcham and Newbury area. Links with our primary and secondary partnership schools have been considerably strengthened through joint project working, especially following a visit from the Starchaser team in April 2009, and links with our local community have developed too. A small group of year 13 students worked with members of our local Astronomical Society to carry out a series of observations using the Faulkes Telescope South, which have been recently published in the Journal of the British Astronomical Association [1].

A group of year 10 students submitted messages to be carried on the Kepler mission which launched in November 2008. We're working with our feeder primary schools to use space as a vehicle for shared project work, and the thread continues through the new year 7 science curriculum through an emphasis on non-Earth scenarios for the teaching of simple forces and energy topics.

Year 2 will see Kennet carry the work forward through a Space Academy for Key Stage 3 students - cross-curricular working with our colleagues in textiles, geography and technology will enable our students to develop their ideas through a range of space-related topics (such as design of Moon bases, use of satellite data to identify and monitor land use issues, design and testing of remote control devices and the investigation of the performance of lightweight fabrics under space conditions). The first graduates from our Space Academy will be in 2010, and the programme will continue for the foreseeable future.

Key Stages 4 and 5 are a key part of the programme too - we're working with the dance department to enable the students to visualise and interpret concepts of "First Contact", and project links with research establishments (such as the Science and Technology Facilities Council (STFC) at the Rutherford Appleton Laboratory) have been strengthened through our involvement in Leading Space Education.

We will also be seeking to enable students to find out more about the STEM career opportunities available to them through space technology, and getting the local community involved too is an important aspect of our work. Next year's Open Day will act as a showcase for the students' work, and a public lecture is being arranged to enable the local community to come into their school to learn about cutting edge topics in space research.

Students in Thatcham and beyond are already benefitting from the opportunities that Leading Space Education status can bring. It's an exciting programme for everyone involved, and the benefits will be felt for years to come.

## References

1. D Boyd et al., "CCD BV photometry of three southern galactic open clusters using Faulkes Telescope South", J. Br. Astron. Assoc. 119, 4, 2009.
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