

Developing a space themed curriculum - Hadley Learning Community

Leading space education programme

Key actions

A themed curriculum was run at KS3. Through the connection with the leading space programme - a topic of 'Earth and Beyond' was developed across the school curriculum. Each department designed/developed their own scheme of work (SOW) based on the theme. Some were more detailed than others. As enrichment to these SOWs several activities were organised by school, since the involvement in the leading space programme, that also included linked external partners e.g. - Star-chaser Rocket and Meade Telescope.

The Nova 2 space rocket visited the school where all of KS3 and selected KS4 students took part in a presentation, visited a rocket and took part in a rocket building activity to build a rocket to fly as high as possible.

Meade Telescope

We have recently commissioned a 14in reflector telescope that we have used with various different space programmes such as 'Stellarium' which has allowed STEM pupils to seek out and observe planets, the Milky Way and the moon. STEM pupils have also had the opportunity to manipulate images using 'registax'. This is a software programme that has allowed the video image frames that have been collected from the telescope to be overlaid on top (superimposed) on top of each of other- giving sharper images.

Star-chaser activities included all year groups across KS3 (approx 350-400 pupils). The use of the telescope has been mainly used by the STEM club members (approx 15 - 20 pupils). As a development to this, the HLC (Hadley Learning Community) has become the regional centre for a STEM net club which involves 5 additional secondary schools. It is planned to disseminate the activities to these network schools.

Impact on lead and partners schools

The main impact on the school has been an increased uptake in the number of children involved in STEM subjects and activities. There has also been professional development opportunities for all teaching staff in the STEM subjects and also due to the development of the 'Earth and Beyond' theme. It has also had a big impact on the development of all other subject areas. School enrichment has mainly been through the STEM club with the development of rocket propulsion activities and also the observation of space bodies using the Meade telescope.

Impact on specialism

LSEP (Leading Space Education Programme) has helped HLC to 'spread the word' across the community etc about the specialism and also promote careers in STEM areas.

Top tips

Time is the major barrier - planning time and coordinating activities - especially with other schools.

The future

- Scheme of work across the whole school - increased uptake/interest in STEM from the pupils
- Professional development of staff
- Development of new GCSE Astronomy and enrichment clubs

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