

Engaging with the wider community through space education - Reepham High School and College

Leading space education programme

Key actions

Activities were developed for a "space themed" day which took place on a Saturday and was open to the public. The event was advertised within our school, a banner was made and displayed along a local main road, leaflets were sent to our partnership schools and an advert was placed in our school newsletter.

The aim of the event was to raise people's interest in astronomy and space in a fun, interesting and informative manner for all of the family. Approximately 300 people attended the event, ranging from children below the age of 5 all the way through the ages to 40+. The activities were designed to cater for everyone.

We are lucky to have a 30" deep space telescope located on-site and regular guided tours allowed visitors to find out more about this type of equipment. Students from the astronomy club demonstrated the resources available to them and we also asked a local astronomy retailer to demonstrate various telescopes. Other activities included visitors making and launching (both water and air) rockets, watching a show in an inflatable planetarium, taking part in physical exercise under the context of "Fit to be an astronaut" and finding out how satellites can be used for GPS and communications by companies searching for oil at sea.

A guest speaker gave an inspiring talk on astrobiology and how extremophiles found on Earth can provide a more compelling case for there to be life on other planets. Children friendly demonstrations in a science lab (before and after the talk) helped to reinforce the ideas put forward by the guest speaker.

Some of the activities required visitors to sign up for specific time slots, whilst others were open for guests to walk in and take part. This worked well as it allowed visitors to turn up and get straight into the action, whilst allowing activities which required a more structured approach to run in timed sessions.

Visitors were asked to complete an online survey prior to leaving the event. Approximately 300 people attended the event. Of the 100 surveys completed, 65% were (either primary, high school, sixth form) students which gives an approximate number of 195.

Post event survey shows that over 50% of attendees were more interested in one or more STEM subjects as a result of attending the event. Also over 60% of high school students said that they were more likely to take A' Levels in one or more STEM subjects due to the activities.

Quote from email sent to school:

*"My eldest daughter enquired about the astronomy event on Saturday... Taking her 2 young boys 4 and 7 she was obviously wondering how much they would find of interest. Not so, **BRILLIANT**, commented Rachel, wishing she had allowed more than 2 hours. Well done Reepham HS is the comment I have been asked to pass on."*

Impact on lead and partners schools

Resources developed which can be used in future events or in the classroom or in extracurricular clubs.

Increased enthusiasm for STEM subjects amongst current students.

Impact on specialism

This event allowed people of all ages to develop their interests in astronomy and space in a fun, informative and inspiring manner which engaged families in the community.

It also allowed teachers from other schools to attend the event and to see how to deliver the different activities so that they could then reproduce them within their own schools.

There were a number of teachers from different departments within the school developing resources which allowed the theme of space to become a link between the different subjects.

Top tips

From the feedback given in the survey, visitors would have liked better signage to show where the different activities were located and it would have been helpful to have a few more student helpers or staff on the day who could have pointed people in the right direction depending on what they wanted to see.

There are a number of local organisations which would probably help at similar events. In our case:

- a local amateur astronomy group demonstrated some equipment
- a local telescope retailer brought some equipment to the event
- the UK Rocketry Association ran one of the rocket activities and brought in some larger display rockets
- a local marine survey company brought in very accurate GPS equipment and allowed visitors to test the equipment to track their movements very accurately
- an inflatable planetarium was brought in by a local Science museum via their outreach programme.

Most of the activities can take place indoors or outside. Each activity was assigned a location in case of good weather and a location in case the weather was bad (may be the same location). Raffle tickets can be created for free at: <http://www.raffleprinter.com/> Make it clear in the advertising that the event is free.

The future

Although there are costs associated with running events such as these, we have developed resources which would allow a similar event to be run again (possibly annually).

We received good constructive feedback from the event and could improve the event in the future by developing more activities, for example:

- Face painting (alien / astronaut theme)
- Best dressed (alien / astronaut) competition
- Drawing competition
- Other telescope companies to demonstrate different types of equipment
- Weather forecasting company to attend
- More guest speakers to have more than 1 talk aimed at different audiences, e.g.
- Starchaser to bring rocket & give a talk.
- Big bang talk.
- Mars lander workshop.
- Radio link with ISS.
- Although the event takes place during the day, possibly organise for an observing session during the night.

Some of the activities developed for this event can be used in the classroom or as part of an extra-curricular club (e.g. a rocket club, STEM club, e.t.c.)

Contact at school

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