



Event and activity case-studies

Charities and Institutions

The British Science Association would like to acknowledge those organisations that provided case-studies for this guide.

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Froglife Trust

Toads on Roads

NSEW Event Awards 2011: Highly Commended



Froglife's education team put together a successful interactive exhibition for National Science & Engineering Week. The project was led by the young people on Froglife's Green Pathways scheme and from their ideas we conjured up an exciting and innovative way to communicate the plight of toads on Britain's roads to the general public.

It took the hard work of young people from six Peterborough schools, two after school groups, young offenders from the Froglife Active Conservation Team, 1st Yaxley Brownies and Froglife's Wildlife Ambassadors to pull together this remarkable exhibit. Although we didn't receive any funding, Perkins Learning Centre, Mears Workshop, Peterborough City Council, St John the Baptist Church and Opportunity Peterborough all donated the use of their facilities, which helped no end.



The event consisted of a 'Toad Road' and breeding pond, complete with toad lollipop lady helping three toad children to cross the road. The interactive 'Scales of Justice' offered a visual concept of how many toads die and the 'Lily-pad Area' provided a space where young and old alike could learn to make origami toads and see who's toad could get into the pond the fastest! Everything in the exhibition was handmade from recycled materials, thus keeping the environment, as always, at the heart of our work.

Overall, 431 people visited over the four days and it received a 'Highly Commended' in the Outstanding Achievement Award category. All of the participants and visitors were extremely impressed with the standard of the exhibit.

Visitor: "What a delightful concept, it's great to see children learning and having fun!"

Participant (age 9): "Making origami toads was my favourite because it made me happy and I made something new"

Visitor: "The scales really work; I can't believe how many toads die each year."



Froglife feel that the Toads on Roads exhibit successfully communicated the plight of toads on British roads to the general public of Peterborough; we appeared twice in the Peterborough Evening Telegraph and also on local radio.

Froglife are dedicated to National Science & Engineering Week, finding it a great way to show our fun and exciting approach to environmental science. Although we don't know what we will be doing for next year's exhibit you can be sure that we will be entering something innovative and exciting!

Science Learning Centre North East

Liquid Science

NSEW Event Awards 2010: Finalist



A Newcastle nightclub became an unlikely science classroom as lessons left the lab and hit the dance floor to tackle the region's new worrying position as the country's teen smoking and drinking capital.

Hundreds of students from across the city and North Tyneside discovered the science of a nightclub at the educational project 'Liquid Science', which was launched in the region by Science Learning Centre North East.

The authentic environment of a top city night spot coupled with an exciting range of interactive workshops aimed to inspire scientists of the future but will also drove home the consequences of smoking, drinking, drug abuse and un-protected sex.



Over two days, 360 youngsters from eight schools discovered what science can be found in a nightclub at Liquid & Envy, while health experts illustrated the long and short term biological effects of drug use, substance misuse and sexually transmitted diseases.

The students received first-hand tuition on the technical tricks of the trade from the club's DJ and lighting experts, involving experiments with lighting, lasers and mirrors.

Their bodies were monitored for the effects of dancing by students from the University of Sunderland and they learned about cutting edge identity technology that is helping nightclubs deny access to known criminals through sophisticated blood monitoring systems.

Claire Willis, Inspiring Science Coordinator at Science Learning Centre North East, said: "To inspire and enthuse young people about science we need to make the subject as relevant to their lives as possible.

"We know that music is a common link between students of this age and have therefore designed this ground-breaking programme of scientific teaching around that theme, setting it against the exciting backdrop of a real nightclub.

"Real life applications for science and technology – especially in such a lively environment - can provide the spark to change young people's perceptions of what is involved in scientific work and will help the region continue to nurture world-class scientists."

TeenTech2010

Berkshire Education Business Partnership Organisation
NSEW Event Awards 2010: Winner



How do you introduce young people to the possibility that they themselves might design the gadgets to which their thumbs seem permanently glued?

Working closely with sponsors and other local businesses, CBEBP and EBP partners from across Berkshire ran TeenTech 2010, a day in which Year 8 and 9 students were encouraged to consider opportunities in Science, Technology, Engineering and Maths. The event, the second TeenTech day, was held during National Science & Engineering Week.



Three hundred students from 22 Berkshire schools, accompanied by their teachers, were able to try their hand at experiments, design prototypes for the year 2050 and find out about jobs that they never dreamt existed.

Technology expert Maggie Philbin, whose TV credits include 'Tomorrow's World', compered the day. She commented that it gave the young people "a taste of the exciting possibilities in contemporary science and engineering".

Through a packed programme of activities and exhibitions, employers True Snowboards, BT, IBM, JVC, 3M, Sky, AWE, Scottish and Southern Energy, Thames Water and Verizon showed students how *they* could be the ones designing and developing the technology of the future.

Kelly Odell, Events and Enterprise Manager, says, "The region is widely considered to be Europe's 'Silicon Valley' and we welcomed the contribution of leading companies involved in developing the cutting-edge technology that plays such a key part of teenagers' lives."

Froglife Trust

Under the Surface

NSEW Event Awards 2010: Winner



This real community event, involving local groups in the building of an exhibition, was a real-life example of excellent community engagement.

Froglife's week-long *Under the Surface* exhibition featured larger than life pond creatures, like frogs, tadpoles and pond invertebrates, and urged visitors to explore the make-believe underwater scene to understand more about the relationships between the animals and plants.



A combination of young people and community groups helped make large-scale models of different wildlife that lives in freshwater at a nature-reserve near Petersborough. They learnt all about sorts of weird and wonderful creatures, and the resulting exhibition provided a frog-sye view of life in a pond, allowing visitors a truly immersive 4D experience in the unlikely setting on an ex-pub turned community arts centre off Peterborough's central shopping promenade. Attendees came face-to-face with dragon-sized newts and tadpoles the size of poodles!

This type of event was something of a niche for Froglife, celebrating International Year of Biodiversity and bringing an interactive and hands-on approach to sharing important concepts in conservation. They aim to develop this 'science with a difference' approach further through their education strategy and future events and projects. The larger than life animals featuring in the exhibition were created by local children through the Froglife project, Ponds for Life, funded by the Heritage Lottery Foundation.

Information from Tim Suffield on the event:

"Go4SET is a scheme that links a team of year 9 students with a local Science or Engineering company to work on an environmental project. For 2009 they had been working together since November 2008 and at this event presented their final work with a chance to be assessed and win prizes.

Their project was to come up with an energy conservation plan (to reduce cost and/or energy usage) for a specific building on their school site. The schools and company mentors had been working for a couple of months, but the event was open to guests who were interested in Go4SET or wanted to view the projects that the teams completed."



Surrey SATRO

The Problem Solving Challenge

NSEW Event Awards 2009: Highly Commended



Description of event from Adam Hunt:

"The Problem Solving Challenge has been running for Surrey schools for over 20 years and is one of the most highly regarded events of the school calendar. The aim of the event is to promote engineering and engineering principles as well as encouraging the students to develop their Personal Learning and Thinking Skills including: Independent Enquirers, Team Workers, Creative Thinkers, Self-managers, Reflective Learners and Effective Participators.

This year we had a record booking of over 1100 students making 184 teams from 76 schools booked within two and a half weeks of opening! Students were set the challenge of completing the brief within an hour and a half using the assorted materials provided. The 42 Science and Engineering Ambassadors were present to encourage and advise the teams of 6 students in their design and construction.

The Ambassadors also judge the challenge attempts after the construction phase. The winners and runners-up of the Challenge are invited to the Final held during NSEW to see which team and school are the best at the Problem Solving Challenge.

A number of Schools keep the challenges and use them within school throughout the year and during the lead up to the Challenge and we are happy to give advice and source Ambassadors for the school led events."

British Geological Survey

Fossil and Rock Show

NSEW Event Awards 2009: Finalist Outstanding Contribution, David Bailey



Information on the Fossil and Rock show from David Bailey, who has been involved in NSEW activities since 1994:

"The Fossil & Rock Show is designed for primary schools (KS2). Earth science is revealed as exciting, engaging, sometimes messy, and even noisy, through a mixture of hands-on activities, demonstrations, access to world-class collections and multimedia presentations.

The aim is to inspire a sense of wonder and promote a spirit of enquiry and exploration into the natural world. The event is marketed through direct mailings to schools in the region, through contacts at STEMPOINTS, in the local media and via our own website and YouTube. It is already fully booked.

The event supports and enhances the National Curriculum at KS2. It focuses particularly on key concepts such as the physical properties of different materials, the rock cycle, sustainable use of mineral and energy resources, natural hazards, the structure of the Earth, the history of the planet, evolution of life and the way that animals are adapted to different environments.

The Fossil & Rock Show has been running for over 10 years. Since 2005 we have also run a 'Family' event at our Keyworth Headquarters on the second Saturday of NSEW which includes hands-on activities, talks, demonstrations and tours of the national collections. We have also run public field excursions and open days from our offices in Exeter and Wallingford."





Description of the event from NYBEP Ltd:

"Discovery Days are a wonderful, free, interactive science exhibition featuring a host of hands on, practical activities designed to inspire, stimulate and challenge preconceptions of science and technology.

The exhibition workshops are run by a range of experienced local education providers and businesses, covering different aspects of science and technology. Discovery Days are organised as part of the York Festival of Science and Technology and last for three days. They are split into: two days for York and North Yorkshire Primary Schools and one day open to the public. Workshops are hosted by a range of organisations who present science and technology in exciting and informative short, taster workshops. They help children to realise science is everywhere!

To promote Discovery Days to schools we sent fliers with information on the event to every primary school (Special and Independent) in York and North Yorkshire. They also use this flier to book their place on the event.

To promote Discovery Days we provide information on our own website and commission glossy leaflets to advertise the family challenge and public open day - these are distributed around the city of York to target tourists and residents alike, they also go to all primary and secondary schools in York and North Yorkshire.

The event is also included in the programme for the York Festival of Science and so is on Science City York's website and promotional leaflet for the Festival. Overall Discovery Days aims to promote science to school children and families in a fun and stimulating way with interesting, interactive activities which involve more science than they think!"