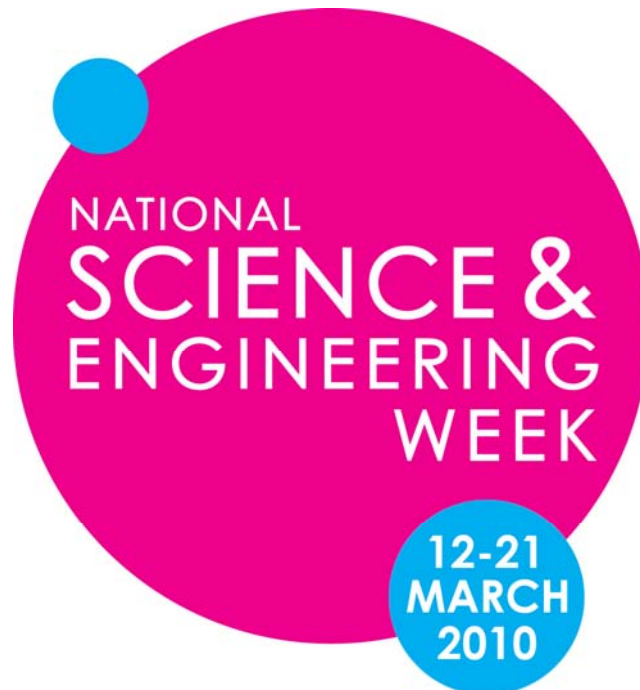


NATIONAL SCIENCE &
ENGINEERING WEEK 2010

EVALUATION REPORT



In partnership with:



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INTRODUCTION & CONTENTS

Overview:

National Science and Engineering Week (NSEW) is a 10-day, annual celebration of science, engineering and technology. People of all ages participate in, and organise, a wide range of events and activities across the nation. NSEW began in 1994 as a grass-roots initiative, with March now recognised nationally amongst schools and event organisers as the time to do something extra special with science. There are no restrictions on who can organise events and activities, the topics on which they focus or the audience/venue; the resulting programme is an eclectic mix, suitable for people of all ages and abilities.

For 2010, NSEW was given the core theme of 'Earth'; the topic was chosen to complement and work alongside the UN-designated International Year of Biodiversity (www.biodiversitylife.net), which was co-ordinated in the UK by the Natural History Museum.

Aims and Objectives:

The main aim of NSEW is to stimulate and support scientists, engineers, science communicators and the general public, on an individual or company/institution basis, to produce science and engineering events across the UK. The purpose of these events and associated activities is to engage and inspire as many people as possible with science, engineering, technology and their implications.

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METHODOLOGY

This report lists each of the Impact, Process and Demographic objectives for 2010. It takes information from relevant sources to assess achievement against each objective.

Four main sources of information are used:

1. The central NSEW 2010 database and webstats package
A total of 1893 events were registered by 947 event organisers.
2. Completed and returned evaluation forms
A total of 937 evaluation forms were returned from organisers (388 of these were NSEW Small Grants for Schools Scheme (SGSS) recipients, some of whom had not registered their event), together with 1716 adult attendees (aged 16+) and 394 presenters.
3. A national opinion poll omnibus survey (NOP)
A randomised sample of 1000 people were questioned, results were weighted to UK socio-demographic population figures.
4. The media monitoring service (Durants)
Monitoring took place of local and national broadcast media and press.

1. IMPACT OBJECTIVES

Assessing the impact of NSEW 2010

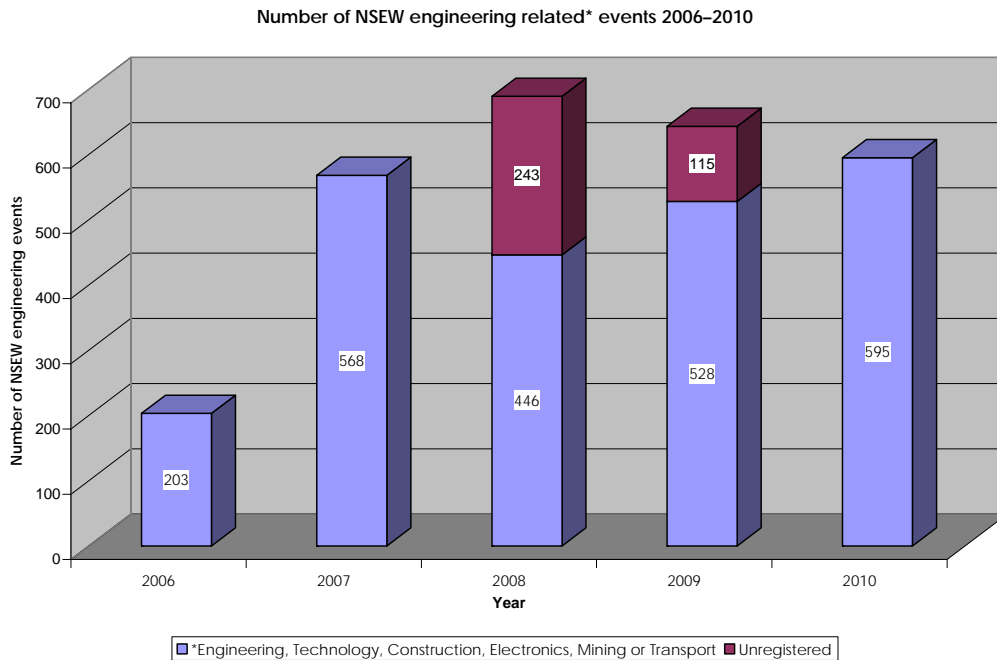
1. To increase the number of registered events

Year	Number of registered events	% change from previous year
2004	1013	
2005	1090	+7.6%
2006	1227	+12.6%
2007	1466	+17.8%
2008	1375	-4.9%
2009	1554	+13%
2010	1893	+21.8%

The total number of registered events provides the most accurate estimation of the size of involvement in NSEW nationwide. This table shows that the number of registered events is at its highest yet at 1893 events, an increase of 21% from 2009.

This increase is likely due to the doubling in size of the NSEW contacts database (page 32), which has allowed the NSEW team to retain contact with those who download resources from the website.

Total number of engineering events:



There were a total of 595 engineering-themed events in 2010; while this was a total decrease on 2009 figures there have been more registered events (including the SGSS-funded events). This is likely to be owing to the 2010 theme of 'Earth', which encouraged organisers to put on nature or biodiversity-themed events.

This figure was found using a keyword search of 'Engineering, Technology, Construction, Electronics, Mining or Transport' in both the database of registered events and the list of unregistered SGSS-funded events. There was an increase of engineering events in 2007 due to the name change from National Science Week and the partnership with EngineeringUK. It should be noted that engineering is now seen as an established part of NSEW.

Total number of school events (including SGSS-funded events):

Year	Number of School* events, including registered SGSS-funded events	Unregistered SGSS-funded events	Total
2008	447	203	650
2009	609	494	1103
2010	863	368	1231

* Registered event occurring at a school, school club or college, organised by a local STEMPOINT or specifically run for schools.

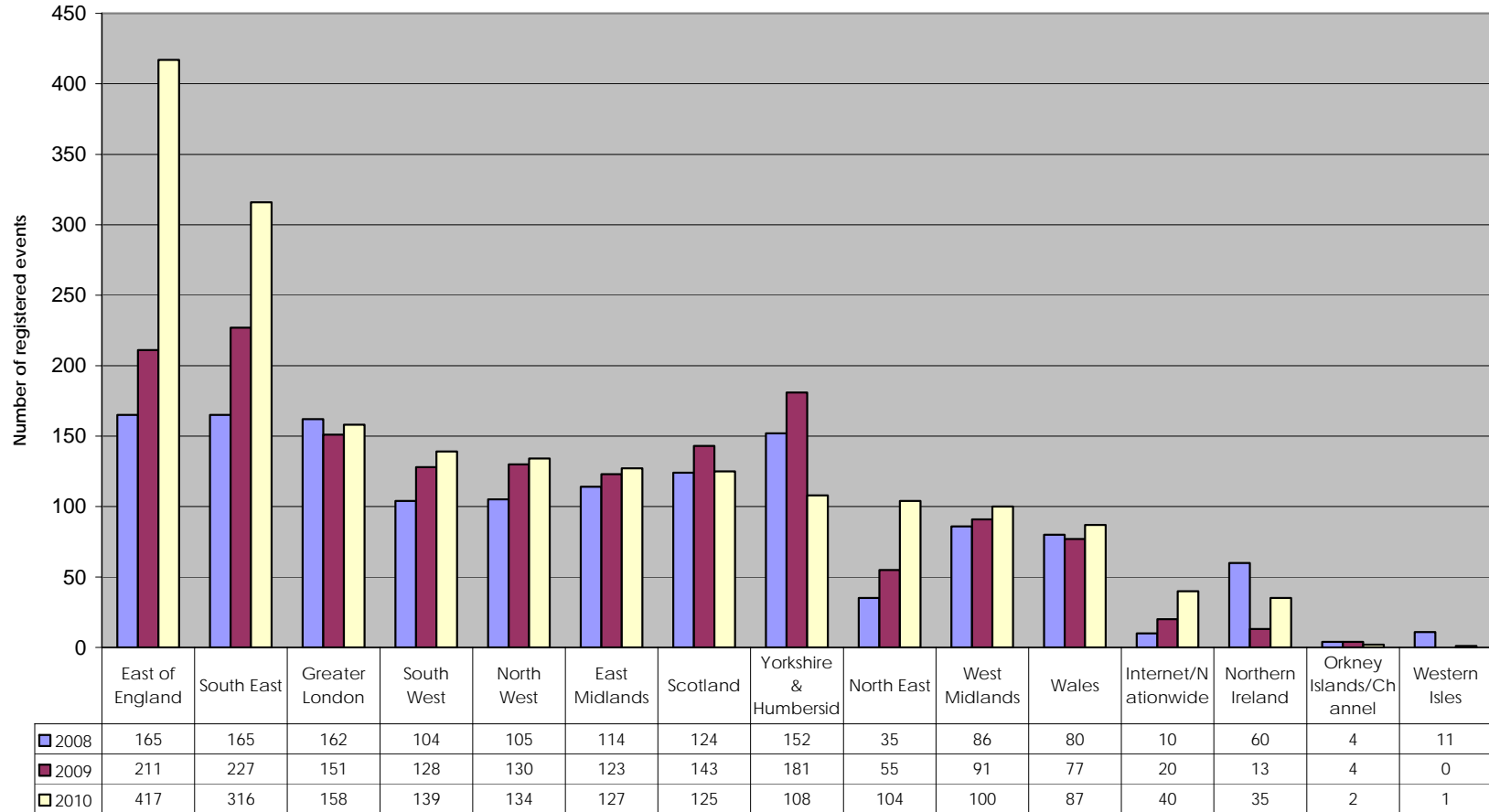
The table shows that the total number of known school events has risen during the campaign to 1231. Further details of the SGSS-funded events can be found on page 14.

The data collected in 2010 from registered events and non-registered SGSS-funded events suggests that 58.4% of events that took place during NSEW occurred in a school, school club or college, or were organised by a local STEMpoint or specifically run for schools. This compares with 41.6% of registered events which did not take place in schools and were therefore likely to be targeted more towards an adult or family audience.

This demonstrates that NSEW still has a significant and important adult-directed element; it is important to ensure that any future national activities are tailored for both audiences with an objective to attract equal numbers of adult and younger participants. It should also be noted that the British Science Association has a much larger communications route into schools – therefore it is much easier to raise awareness of the campaign in schools and encourage them to participate/organise events.

Number of registered events per region:

Number of registered events per region of the country during NSEW (2008–2010)



The graph demonstrates a good regional spread of NSEW events across the main regions of the UK, with far more registered events from the East of England compared with previous years. The South-East and the East of England are the most active regions during NSEW, with event numbers increasing impressively year-on-year. This could be due to closer working relationships with the organisers of the main Science Festivals in those regions, and an inclusion of those events on the NSEW online programme.

Northern Ireland has shown an increase from 2009, as the local Regional Officer has increased networking in with key players in the region. Yorkshire and Humberside, Scotland and the Orkney Islands/Channel Islands are the only three regions where event numbers have fallen from the previous year. To address this problem we recommend investigating the differences in event numbers further and putting on more information sessions in targeted areas in each region.

2. To maintain overall numbers of events

Year	Number of registered events	Unregistered events we are aware of	SGSS-funded schools	Event numbers from mass participation projects	Unregistered events uncovered by media trawl	Total**
2008	1375	619	203	682 schools (Ready to Learn - The Experiment)	41	3599
2009	1554	227	492	600 schools (Darwin in Space Competition)	Not included	3591
2010	1664*	538	444	580 schools (520 Endanger Ranger Competition plus 60 What on Earth Project)	67	4116

*Not including events registered which have been funded through the SGS scheme (Total number of registered events is 1893).

** Includes 25% increase to take into account other unregistered events across the UK during NSEW.

As shown by the table, the total number of events and activities for 2010 is an estimated 4116, an increase of 14.6% from the previous year's calculation and a higher estimate than any previous year.

The high numbers of unregistered events this year were uncovered through the call for marketing material requests. Materials were requested from 538 organisations that had not registered an event, or received a grant from the SGS Scheme, so it can be assumed that events and activities took place at these organisations.

3. To maintain overall numbers of participants and attendees

Mass Participation Activities – a summary

There were several mass participation activities organised during NSEW 2010 to increase awareness of NSEW and provide an easy way for large numbers of people to participate in the Week from schools and their own homes. These included the What on Earth Project, the Save our Species Poll, the Nature's Engineers Competition, the Endanger Ranger School Competition and the supported SETI Competition by Penguin Books.

The What on Earth Project

For NSEW 2010, we asked the British public to rediscover their natural surroundings with a camera and a fresh pair of eyes. This was our flagship project for the campaign and was based around our theme of Earth and International Year of Biodiversity 2010. The idea behind the online project was to engage with a wide-range of people across the nation by encouraging them to take photos of plants and animals in their parks and gardens as spring started to emerge in the run-up to NSEW.

We had support from the Open University's iSpot.org.uk and attracted sponsorship from the green roofing company Sika Sarnafil. We also had promotional support from 23 relevant organisations (ZSL, Woodlands Trust, RSPCA, WWF, IUCN, Bat Conservation Trust etc), which helped promote the project to their respective members.

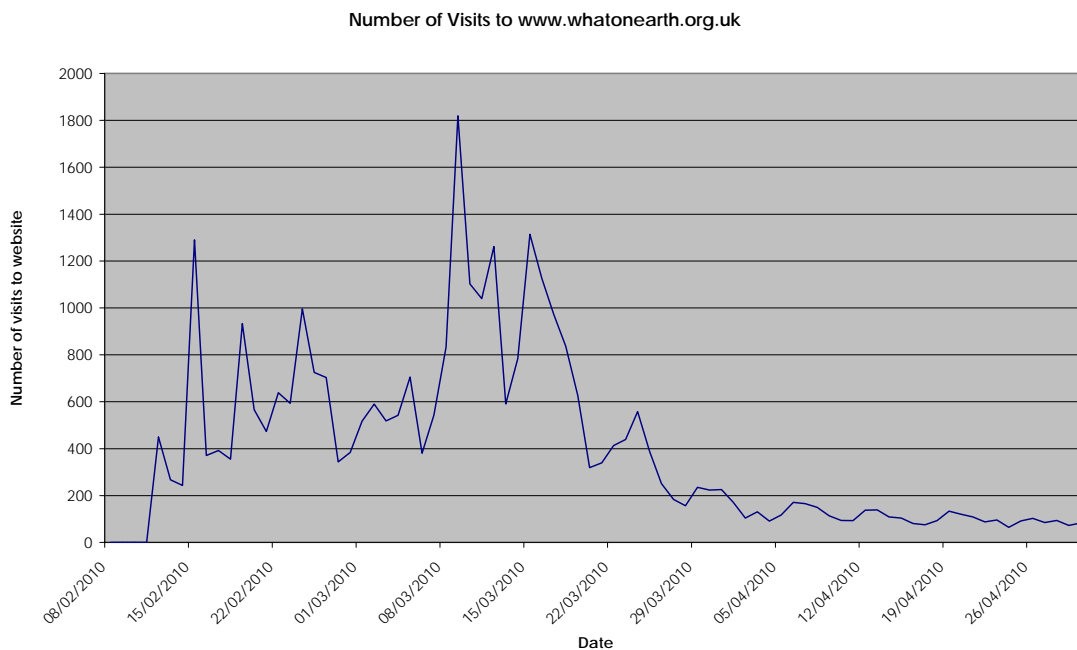
The website (www.whatonearth.org.uk) was the central hub of the project and where participants uploaded their photos for identification by experts and enthusiasts. Guides and a Biodiversity Information and Activity Pack were made available to all those who registered on the site. We also partnered with "Fifi and the Flowertots" to provide a range of free-to-download resources for Nursery school-aged children, which enabled us to promote the project, along with NSEW, to a purchased list of nursery's around the UK to encourage engagement from pre-schoolers. The aims of the What on Earth were to:

- 1 encourage the public to learn about the wealth of British biodiversity and raise interest in IYB 2010
- 2 act as a vehicle for experts to interact with the public by helping identify the species from photos uploaded to the website
- 3 act as a focal project for any media interest and raise awareness of NSEW nationally and drive traffic back to the NSEW/British Science Association website to encourage the public to find out more about local events in their area
- 4 encourage those visiting the website to find out more about other similar projects, including iSpot, and our promotional partners.

There were two main incentives for participation in the What on Earth Project:

- 1 The Green Roof Competition: the area which uploaded the most photos won a green roof for a nominated school in that area (sponsored by Sika Sarnafil). This acted as a focal point for much of the regional media coverage as major regional press backed the campaign. In total 61 schools participated in the Green Roof Competition, with the Green Roof being awarded to Kings Monkton School in Cardiff. This was good for regional coverage but was a very complicated prize – we will look at offering a simpler prize in the future.
- 2 Free seeds: 6000 packets of wildflower seeds were made available as give-aways to all those who registered on the What on Earth Website. Following the success of the seed-giveaway in 2009 and the synergies between this project and the previous year, it was decided this was worthwhile to help raise participation and worth considering for 2011.

The What on Earth website received a total of 18,566 unique visitors from the date the website opened (12 February 2010) until the close of the project (31 March 2010); see Impact Objective 8 for more details of web traffic. The website remains active, with people still able to identify photos. To date 2071 people have registered



A total of 1379 photos were uploaded, with 1067 identifications from 124 individuals who classed themselves as either 'Experts' or 'Enthusiasts'.

The table shows that 76.4% of participants were aged 25–64, with only 7.8% 15–24. This shows that What on Earth was not a successful method of reaching the demographic objective of 2010 (engaging with 16–25 year olds).

The What on Earth Project faced one major and unforeseen challenge that meant it did not meet all of its aims as successfully as intended. The late arrival of spring meant that it did not act as a strong focal point for media interest in NSEW, as it was too early for print and broadcast media to cover the story; this therefore led to less traffic to the website than hoped and subsequently less photo uploads and identifications.

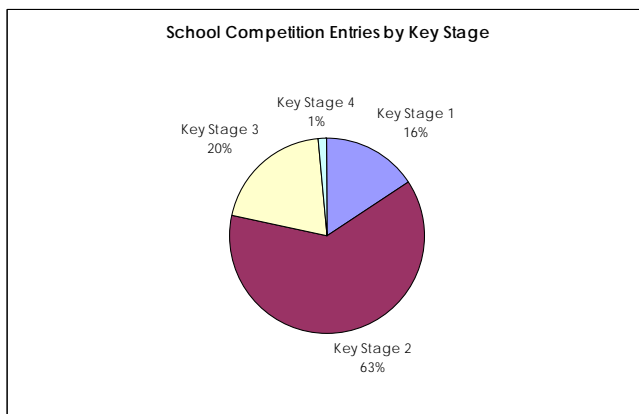
Age of What on Earth Participants	%
0-14	12.7
15-24	7.8
25-64	76.4
64+	3.1

However, the level of regional media coverage, coupled with the Green Roof Competition and free seed giveaway acted as a good drive behind the project.

Endanger Rangers School Competition

The British Science Association, with support from The Zoological Society of London (ZSL) and WWF-UK, launched a nationwide poster competition for schools to highlight the plight of some of the world's most endangered species for NSEW 2010.

This competition, for Key Stages 1–4, asked students to carry out research into animal and plant species that are under threat of extinction. They were asked to explain why their chosen species is under threat and what can be done to preserve them for the future. This was then presented in the form of a poster.



The competition was a huge success with 16,538 entries from over 520 schools all across the country with almost 2/3 of the entries from Key Stage 2 students.

This was the first time the competition was opened to Key Stage 4, and with only 229 entries it is unlikely that this trend will continue in 2011. Instead, it is

recommended that Key Stage 2 be split into two competition categories (Years 3–4 and Years 5–6) to complement the huge variation in quality of entries from that age-range.

The entry form was downloaded 1206 times, with 8269 views to the school competition web-pages from launch until 31st March.

Competition success was similar to 2009 and was based on a number of factors including:

- a. imaginative idea

- b. early organisation and placement on the NSEW website
- c. competition ran across NSEW
- d. benefit of partnering with ZSL London Zoo and WWF who provided prizes and additional promotion.

Save our Species Poll

The Save our Species Poll ran in conjunction with the What on Earth Project, and pitched 5 endangered native UK species against each other: The Corncrake, Greater Horseshoe Bat, Common Bluebell, Stag Beetle and the Hazel Dormouse.

The poll was intended to raise awareness of threatened and endangered native UK species and form part of the complement of media-worthy projects that drove traffic to the NSEW web pages. Short videos of each of the species were hosted on the What on Earth website, each putting the case forward to save their respective species.

The five 60-second videos attracted a total of 5990 views and 3398 votes, with media coverage in *Times Eureka* and *Guardian Science Online*. We secured famous faces Professor George McGavin and Diarmuid Gavin to back two of the species, with experts from the Bat Conservation Trust, People's Trust for Endangered Species and ZSL Whipsnade Zoo covering the other three, which helped to lend some credibility to the project and promote the work of those organisations.

In terms of media attention, again due to the lack of actual examples being available to film there was less than originally planned, however the project did help to drive traffic to the What on Earth website and increase participation in a number of schools who took part in mass voting.

Nature's Engineers Competition

To bring an engineering element into this year's complement of nature-themed mass participation activities, the Nature's Engineers competition was an online poll hosted on the British Science Association website run in conjunction with EngineeringUK.

10 creatures that are known for their engineering feats were pitched against each other in a poll to find the nation's favourite, along with a competition which asked 'why do you think this is the best of nature's engineers?' The competition aimed to link nature with engineering with a prize to incentivise participation. It also received national press coverage in *The Daily Telegraph*, and helped to raise awareness of NSEW 2010.

Nature's Engineers was overall worthwhile due to the press attention it received, it was not as popular in terms of participation (with only 285 entries), but was very low in terms of resources to put together.

SETI Competition

To celebrate 50 years of the Search for Extraterrestrial Intelligence (SETI) project and the launch of *The Eerie Silence* by Paul Davies (published by Penguin Books), Penguin ran a promotion in conjunction with NSEW 2010. The competition asked the public to come up with a message to send into space, which might be encouraged by intelligent life.

The end of the competition, hosted on the Penguin website, coincided with the launch of NSEW 2010 with the winners being announced at the Big Bang Fair in Manchester. It received 755 entries and some good national press coverage (*Guardian and Telegraph*), which helped to raise awareness of NSEW 2010.

Estimated total number of event attendees and participants

Data was collected from two sources – number of attendees predicted from the event registrations, and number of attendees counted from the returned evaluation forms. The total number of participants and event attendees is calculated by taking the average of these two different sources of data.

Step 1 – attendees per registered event

There was a total of 1459 registered events (where expected number of attendees was noted), with a total of 843,555 estimated attendees, and an average of 578 people per event.

Extrapolated to 4116 events this would give 2,379,048 attendees.

Step 2 – attendees per evaluated event

From the 886 returned evaluation forms with details of event and attendee numbers, there was an estimated 298,240 attendees at these events. Average number of attendees per evaluator was calculated at 336 attendees..

Extrapolated to 4116 events this would give 1,385,503 attendees.

Step 3 – average number of attendees per event

The range of attendees from registered events and evaluated events is very large, the average figure is 1,882,275.

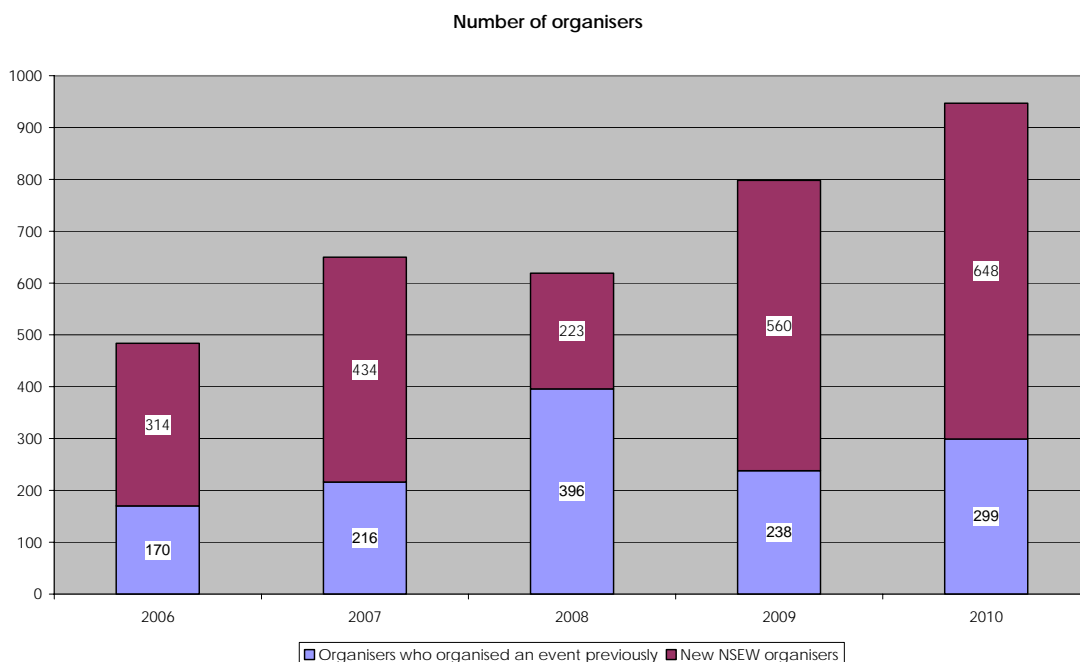
Step 4 – mass participation data

Project	Participants
What on Earth	2071
Natures Engineers	281
SETI	755
Endanger Rangers	16,538
Save our Species	3398
Total	23,043

Including this data gives 1,905,318 participants and event attendees. However, bearing in mind that plenty more schools take part in NSEW without letting us know (we know this by the doubling of our database and number of downloads of resources), we would put a range on the figure from 1.5–2 million participants.

These figures demonstrate that we have met Impact Objective 3 and that the overall number of participants has grown in 2010 in-line with the greater numbers of events. The 2009 figure was 1.4 million.

4. To increase the number of new registered organisations



From the organiser database, this shows that there has been an 18% increase in NSEW event organisers from 2009 who are either new organisers or have organised a NSEW event before.

See Process Objective 16 for full details of NSEW database growth.

5. To retain existing organisations and presenters participating in the Week

	%
Organisations who have taken part before	45.31
Organisations who have not taken part before	54.05
Organisations who will take part again	92.04
Organisations who will not take part again	1.82
Organisations who might take part again	6.14

From the returned organiser evaluation forms, 54% of organisations had not taken part in NSEW before 2010 with 92% of organisers stating they will take part again in the future.

Have you ever presented or helped at a NSEW event before?	%
Yes	41.69
No	55.49
Not sure	2.82
Would you consider being involved in other NSEW events in the future?	%
Definitely	74.23
Probably	22.42
Not Sure	2.32
Probably not	0.52
Definitely not	0.52

From the returned presenter evaluation forms, 41% of presenters had presented before with 96% of presenters stating they would probably or definitely take part in NSEW again. These results demonstrate that both new organisers and presenters have a positive experience.

6. To widen access to science, engineering and technology to schools in challenging circumstances

The aim of the National Science and Engineering Week Small Grant for Schools Scheme (SGSS), as set by BIS, was to widen access to science, engineering and technology activities to schools in challenging circumstances.

Eligible schools must either:

- have a high proportion of pupils eligible for free school meals†
- have a high proportion of pupils who are from black or minority ethnic backgrounds*
- be a small school based in a remote and rural location♦

† A high proportion is considered to be over 30%

* A high proportion is considered to be over 30%

- ◆ Remote and rural schools are considered to be a settlement of less than 10,000 people with a drive time of over 30 minutes to a settlement of 10,000 or more.

The grant scheme was open to any state school within the UK and schools must fall into at least one or more of the eligibility criteria. Priority was given to schools that either met more than one of the criteria or could provide a strong case for falling well within a single criterion.

In order to distribute the fund to as many deserving schools as possible, the award for successful applicants had been set at £150– £250 each; however, for cases of exceptional circumstance, a small proportion of the fund had also been ring-fenced to fund larger grants of up to £500.

In order to qualify for this ring-fenced fund, the application must:

- involve pupils which fall into two or more of the eligibility criteria
- involve a large number of pupils and/or the local community
- include an exciting, ambitious and innovative event proposal
- show a lasting impact of the grant
- relate to an event/activity that would not be possible without the grant.

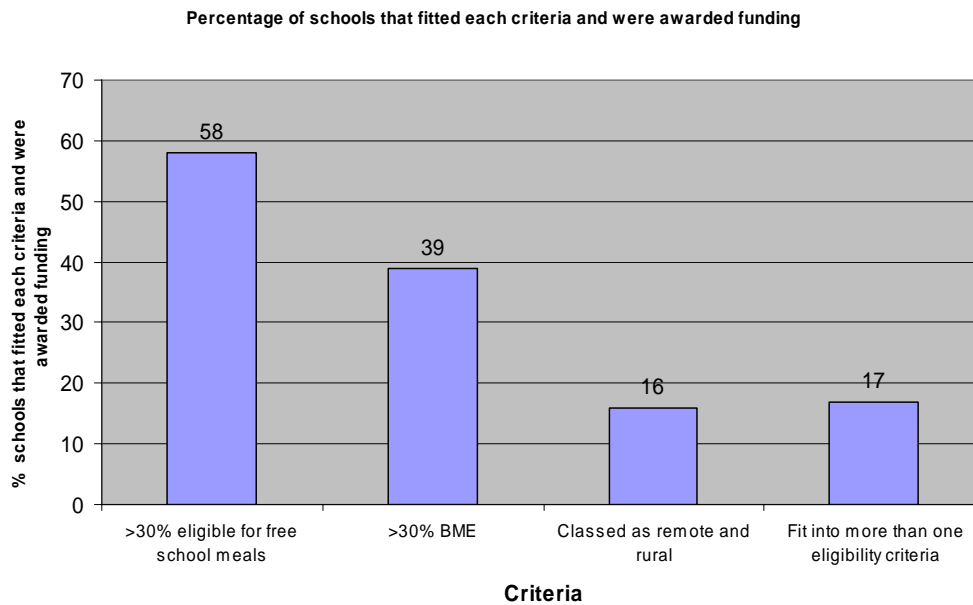
To promote the grant we direct-mailed all schools in the UK that were eligible for the scheme, which included a flyer specific to the grant scheme. This was distributed in our direct-mailings to NSEW organisers and was given out at NSEW information sessions and any other opportunities. We also e-shot schools to let them know about the grant. Information about the grant was included in all NSEW e-newsletters and other British Science Association newsletters including the YPP newsletter. The application form was on our website along with all the information about the grant.

Information on successful applicants

For the 2010 SGSS there were 1065 applications, out of these 444 were awarded grants (41% of applicants). In comparison to 2009, there were 1073 applications and 494 were awarded grants (46% of applicants).

There was a £100,000 fund available to award to schools compared to £110,000 in 2009.

257 schools had over 30% of pupils on free school meals, 174 schools had over 30% pupils from BME. Out of these 74 fell into both the free school meal and high BME categories having over 30% of pupils in each. 69 Schools fell into the remote and rural category.



Feedback from the evaluation:

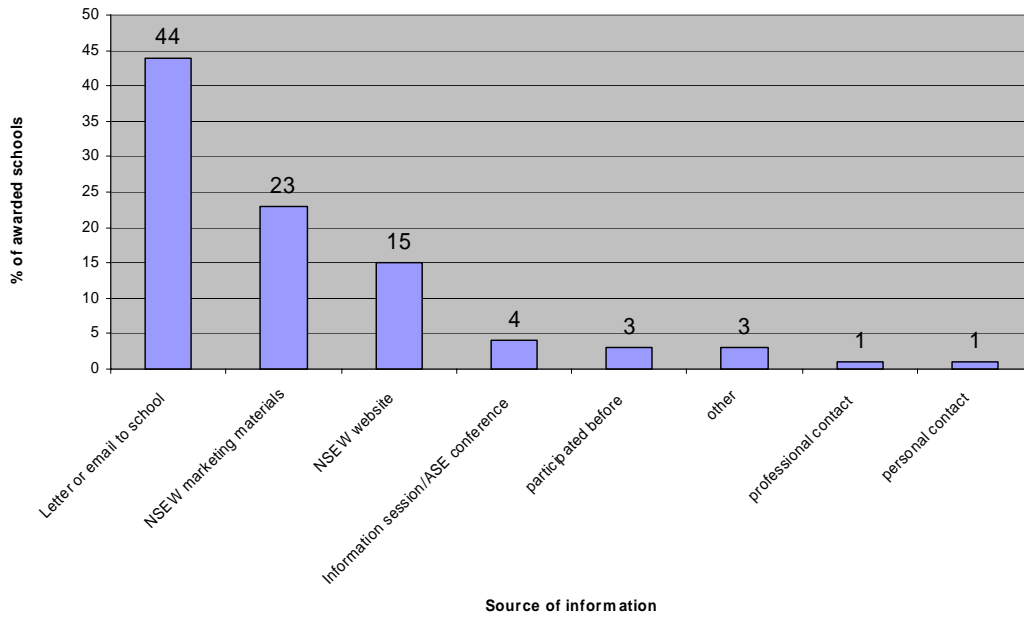
From the feedback received 78% of schools awarded a grant had not taken part in NSEW before.

95% of awarded schools would take part again; the 4% who would not take part again would not do so for reasons such as 'retiring' or 'leaving my role as science co-ordinator'.

How people found out about the school grant scheme:

The graph below shows how the successful applicants found out about the grant scheme. It demonstrates that a direct-mail to the school, NSEW marketing materials and information on the NSEW website are the most successful methods to inform people about the grant.

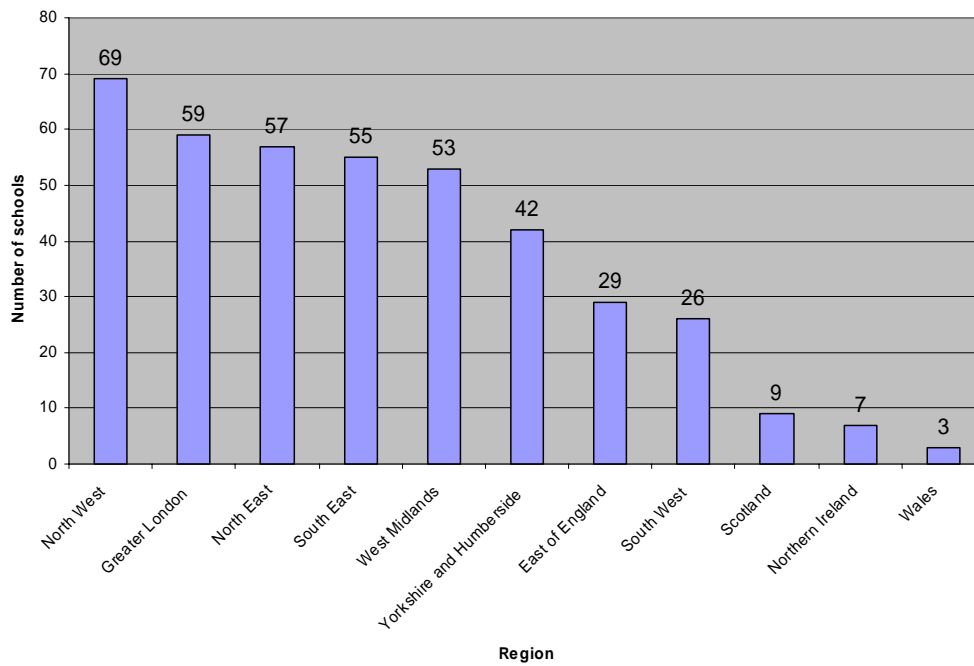
Information on the marketing of the NSEW school grant scheme



Regional spread:

The graph below shows the regional spread of successful applicants.

Regional spread of awarded schools from NSEW school grant scheme



Media Coverage:

Approximately 16% of the schools received some media coverage - almost all was in the local press.

General Feedback:

The general feedback we received was overwhelmingly positive, with 87% rating their event as very successful and the remaining rating it as fairly successful. Some examples of the feedback received are below.

"They were very enthusiastic, excited and really enjoyed learning through the different experiments at the science fair."

"Parents enjoyed learning alongside their children and supporting them to complete tasks and pupils enjoyed explaining and demonstrating what they had been learning during the week."

"A fantastic experience. Resulted in greater interest in science as a subject with many parents visiting the faculty to experience teaching and practical work"

"An evaluation showed that children overall went from enjoying science in school a little bit to enjoying it a lot. Staff felt it was an enjoyable week in terms of fresh exciting activities to engage the children in science and it helped develop investigative and communicating skills in science. It also helped highlight areas we need to develop in skills assessment of science investigations."

Recommendations for next year:

The grant should be promoted and rebranded as a kick-start grant and the amount offered should be set at £200. In previous marketing materials, we have stated the amount awarded can be up to £500 and as a result many teachers assume this is what they will receive – this has led to some negative feedback when they are offered a reduced amount. This has been the main source of negative comments this year.

The majority of schools manage to secure funding from other sources within the school or externally as a result of receiving the grant. Setting the grant at £200 for all successful applicants will make the application process clearer for applicants and also reduce some of the administration involved.

In 2010, the average award per school was £225, compared with £222 in 2009. This shows that despite there being fewer schools awarded this year, funding was comparable to the number of applications year-on-year. Setting the grant to £200 will mean that given the same award this year, we will be able to offer funds to more (500) schools.

7. To increase awareness of NSEW amongst the general public.

Awareness of NSEW amongst the general public is measured by assessing how many attendees had heard of the campaign through a randomised public survey carried out by GFK NOP Consumer. It is also assessed by attendee evaluation forms.

Attendee evaluation forms:

Of the 1716 adult attendee evaluation forms returned, 45% said they had heard of NSEW before, and 48% said they had not, with the remainder unsure.

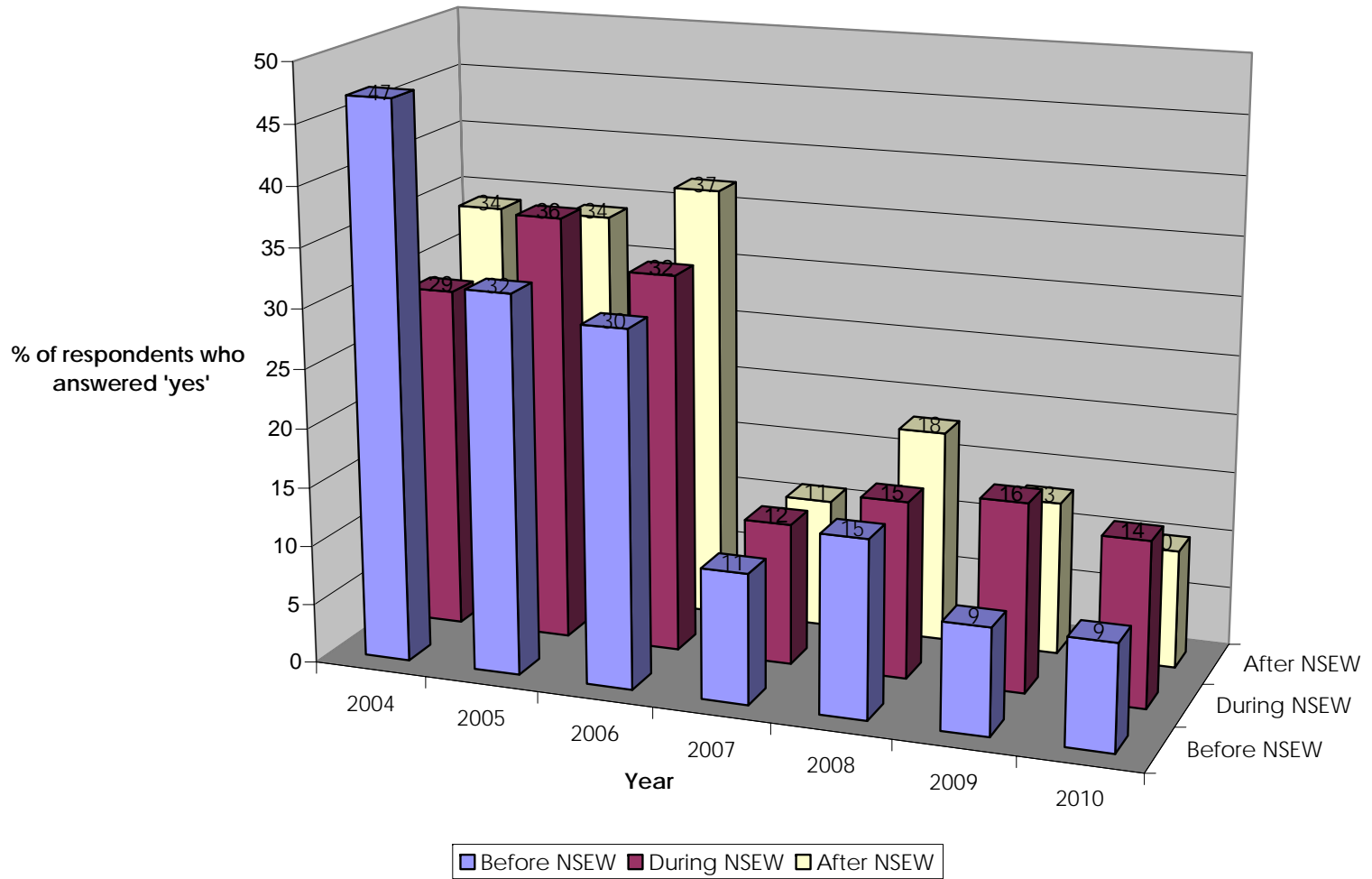
NOP Survey:

GFK NOP Consumer carried out a random survey of 1000 adults aged 16 years and over to determine the level of awareness of NSEW amongst the public. Fieldwork was done on the weekend prior to, during and after NSEW and the question "Have you heard of National Science and Engineering Week" was asked.

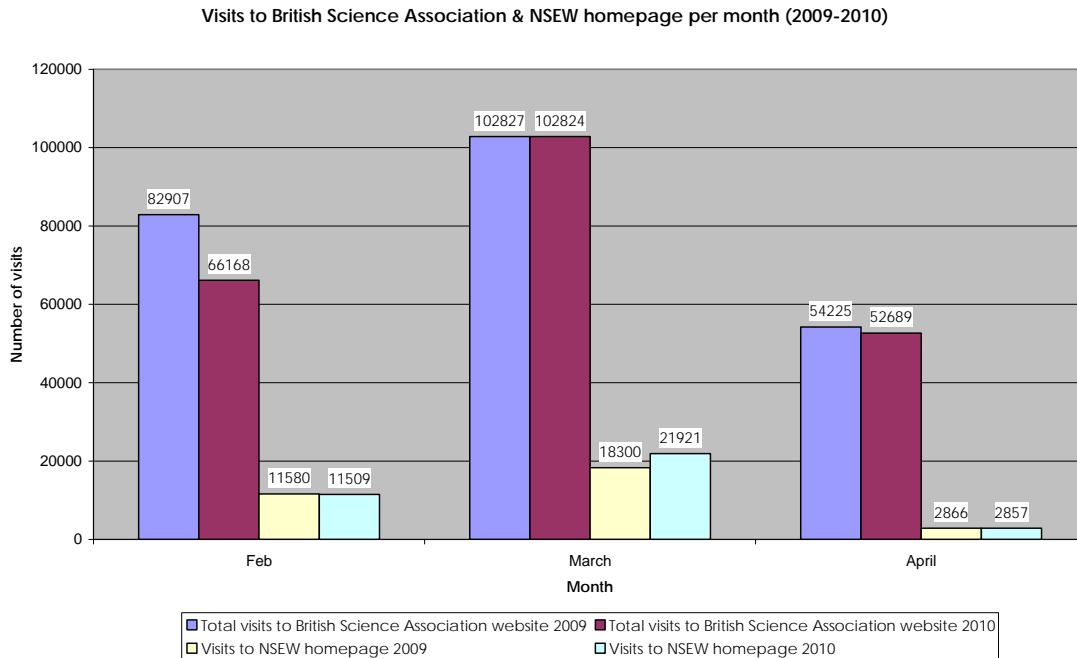
The results from the NOP Survey show that since the name change (from National Science Week) in 2007, general awareness of NSEW has markedly decreased. This is likely because there are several national weeks throughout the year, and the words "national" and "science" and "week" are likely to be met with a certain degree of recognition from respondents who would be likely to answer yes.

It is likely that the inclusion of the word "engineering" has decreased recognition amongst the UK public to a level which is likely more reflective of actual awareness. Awareness is down on the previous two years as show in the graph below, this could be partly due to the decrease in national print and broadcast coverage in 2010, compared with previous years.

NOP Results: Have you heard of National Science & Engineering Week?



8. To increase traffic to the British Science Association/NSEW/affiliated websites



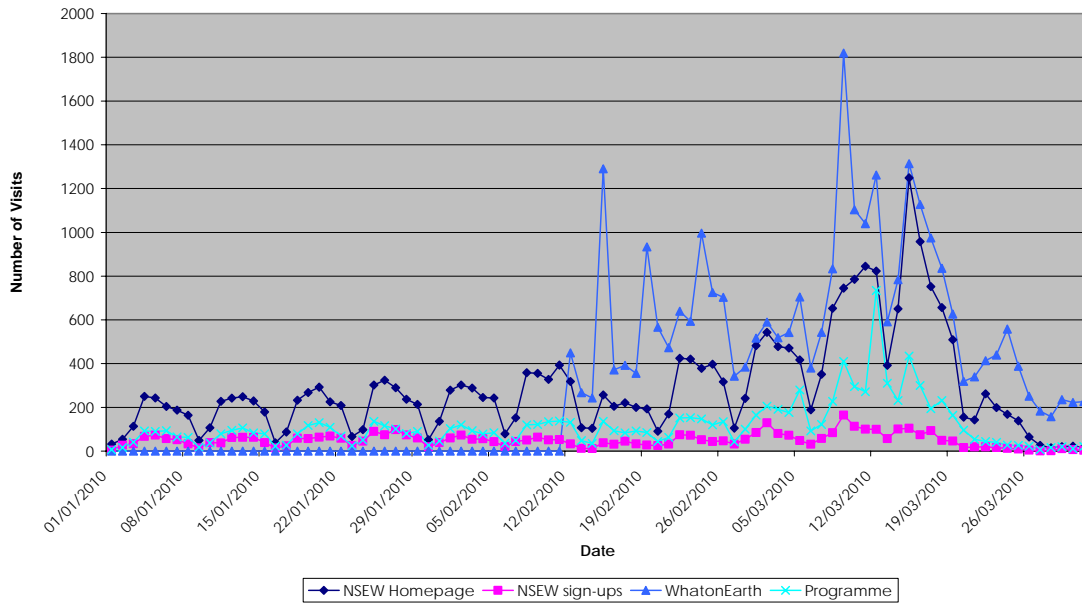
There has been a general increase in web-traffic from 2009 with a 19% increase in traffic to the NSEW homepage in the month of March (39% increase on 2008 figures). This is traditionally the time of year where the British Science Association website receives the most visitors.

This percentage increase could be in-part due to the promotional partnerships created this year with a range of organisations including ZSL London Zoo, WWF, Culture 24, the Woodland Trust's Nature Detectives, School Science.co.uk, TES and Fifi and the Flowertots, in addition to the What on Earth Project website.

This demonstrates the importance of such partnerships with easily accessible mass participation projects such as the Endanger Ranger School Competition and What on Earth in creating a greater level of traffic in the run-up and during NSEW.

The graph below shows that the 'What on Earth' microsite had more traffic in comparison to the NSEW homepage and has been successful in directing users to find-out-more about NSEW. It also demonstrates that during NSEW there were visitors to the What on Earth microsite and NSEW homepage during the weekends, in addition to a peak in visits to the online programme on 12 March. It also demonstrates that visitors to the site in the run-up to the Week are looking mainly for work purposes, or are at work, since the periodic dips are at the weekends.

Visits to the NSEW Homepage vs What on Earth Microsite



NSEW Online Resources:

Free online resources are created for NSEW participants and organisers each year. The NSEW Activity Pack Series traditionally grows each year with a new pack in-line with the 2010 theme, an engineering-themed activity pack and a mass-participation themed activity pack. Activity packs from previous years are also on offer. This year the themed activity pack was 'What on Earth' and EngineeringUK produced "Rockin' Crystals". Along with the "Biodiversity Information and Activity Pack" offered as part of the What on Earth Project (which went online several months later than the rest) these were the most downloaded packs of the year, with "What on Earth" and "Rockin' Crystals" receiving more downloads than their respective packs in 2009.

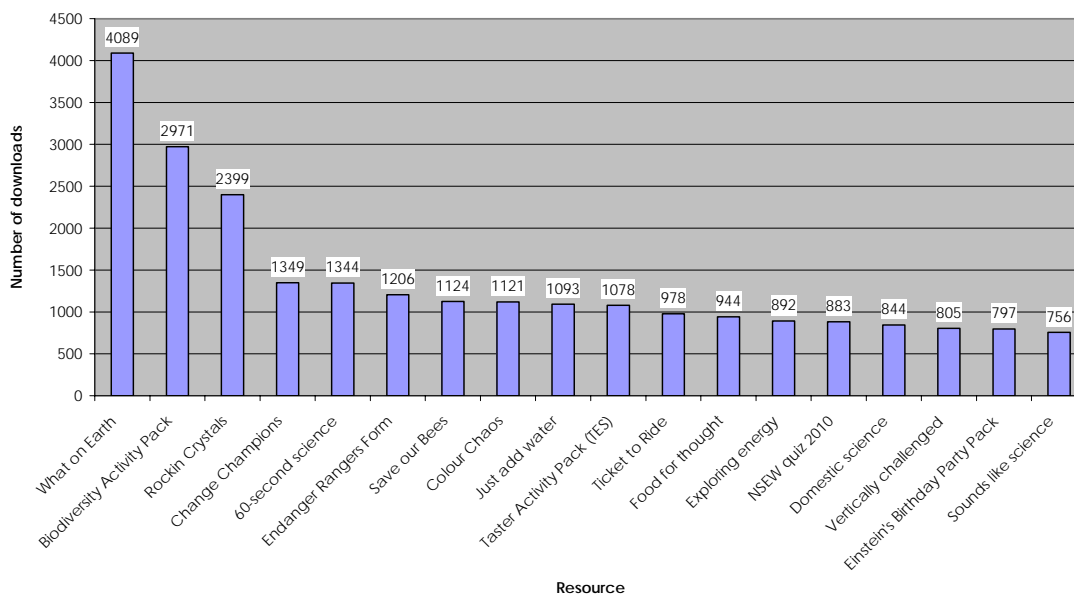
Total downloads are down 26% on the previous year (32,134 in 2009; 23,595 in 2010), not including the Save Our Bees Activity Pack which received an astounding 14,494 downloads in 2009.

Two factors are likely to contribute to this decrease. Firstly, activity packs were moved to a secure section of the website and a log-in put up to encourage website visitors to sign-up to the NSEW database before downloading activity packs. This could have discouraged visitors from downloading the activity packs – however, the database size did more than double during the 2010 campaign.

In addition, some of the activity packs on offer go back almost 10 years. It's likely that visitors to the website have downloaded these activities before and the new packs are seeing more demand. To overcome this in 2011, it's recommended that the existing activity packs are added to and reformatted to extend their life-cycle. New resources based on previous year's mass participation activities are

also going to be put together for 2011, in addition to an activity pack for Special Needs Education students.

Number of downloads of the NSEW online resources 2010



A "Taster Activity Pack" was also offered on the TES online resource website, to encourage TES users to visit the NSEW website for more. This pack had 1078 downloads and generated 405 visits to NSEW website from January to the end of March.

NSEW Online Shop:

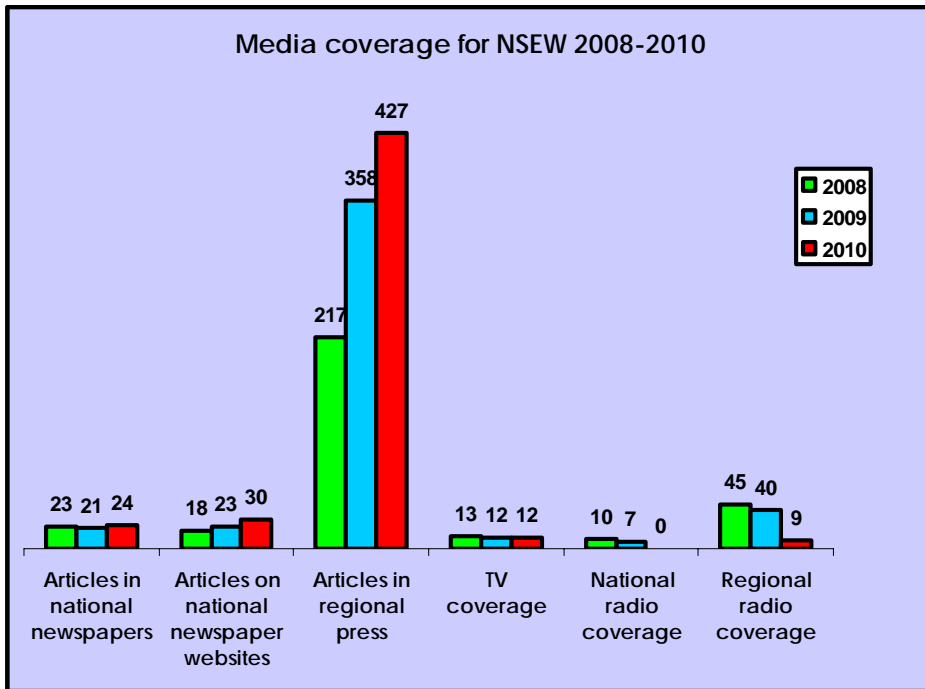
Once again, the NSEW online shop was available for organisers, presenters and participants of NSEW to buy branded merchandise which may be useful to them during the Week. The shop is run by a third-party at cost and no profit is made by the British Science Association. A total of 3970 items were sold for NSEW 2010, up slightly from 3859 in 2009. There were some issues with the cost of products, and more will be done in 2011 to ensure lower-cost for bulk-buyers.

Fifi Downloads	Total
Fifi Picture	1011
Poppy Picture	363
Diggly Picture	338
Daisy Picture	385
Bumble Picture	243
Fifi's weather chart	770
Weather conditions	595
Fifi bug hunt	1062
Total	4767

Fifi and the Flowertots:

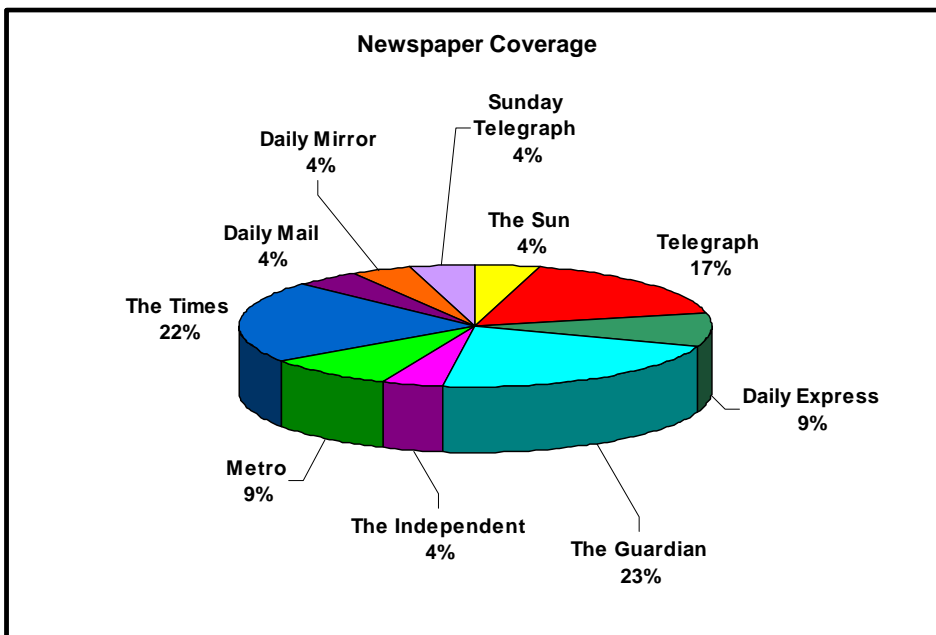
A promotional partnership with Fifi and the Flowertots to provide resources to engage pre-schoolers in-line with the theme of 'Earth' proved fruitful for 2010 with 4767 total downloads of the Fifi resources from the What on Earth Project website and the NSEW pages. These downloads were made available without the need to register personal details.

9. To increase regional and national media in print and broadcast



National newspaper articles/news websites:

In 2010 there were 24 articles across 10 different newspapers (5 tabloid, 5 broadsheet) which is an improvement on both 2008 and 2009 levels, standing at 21 items across 10 different newspapers (6 broadsheet, 4 tabloid) and 23 items in 11 different newspapers (6 broadsheet, 5 tabloid) in 2008 respectively. Furthermore, coverage on high-profile national websites (national newspaper websites, BBC News, etc) increased from 18 items in 2008 and 23 in 2009 to 30 items this year.



Regional newspaper articles:

The articles that have appeared in the regional publications are significantly higher than the equivalent period for both 2008 and 2009 at 427, compared to 217 in 2008 and 358 for 2009. This demonstrates that our efforts to encourage people to use NSEW as a hook for their stories and build coverage around the week have been successful. Furthermore, NSEW as a brand is continuing to grow and become a mainstay in the annual news cycle.

Total print media PR value for 2010: £463,775

National and regional TV:

Although television coverage remained the same as in 2009, the places we achieved coverage was completely different. We had a large number of regional news articles this year, once again highlighting NSEW's ability to engage local interest stories.

There was no coverage on Teachers TV this year, which contributed a large amount to the 2008 figures and no single news story like the 'Save our Bees' campaign that captured the media. Because of these factors, we have achieved coverage on a wider range of programmes with individual news items and therefore reached a wider audience with a greater geographical spread.

There were a number of high profile national articles planned for this year, including Blue Peter and the One Show, but because of the unusually harsh winter, springtime stories, including our biodiversity themed campaigns were shelved by these programmes. Unfortunately in 2010 we secured no national broadcast.

National and regional radio:

Radio was a stumbling block for the NSEW 2010 campaign, achieving only 9 regional radio broadcasts and no national radio coverage. These figures are a significant decline on 2008 and 2009 levels at 45 and 40 regional items respectively and for national broadcast there were 7 and 10 items respectively. This highlights the need for more radio-friendly content for 2011.

Conclusions:

This year, media wise, the green roofs competition was the strongest element of the campaign. It provided a great regional news hook and was effective in engaging people with the 'What on Earth' website. The regional press got behind their local schools' efforts and what began as a relatively minor part of our activities went on to have a much greater impact than we had imagined.

Unfortunately this year we were in a difficult position where a number of our media campaigns had to be withdrawn. There are a number of factors that lead

to these decisions and therefore had a direct impact on the levels of national print and broadcast coverage we achieved.

Primarily tying our campaign to biodiversity meant that we were competing with a host of other stories and initiatives – many organisations were also trying to jump on International Year of Biodiversity.

Also, the unusual weather we had during March meant any nature-related stories were off the news agenda until things started to warm up. Our poster species were not available for any scheduled TV broadcasts and therefore we missed some opportunities here.

Furthermore, our big news piece 'Biodiversity; So What?' had to be pulled due to sensitivities in the media relating 'climategate' and other news items that focus on the negative impact of man-made climate change.

Overall 2010 was a varied year for media coverage, but given the number of obstacles we faced in this area, the fact that we still managed to achieve the highest print and online coverage recorded for NSEW highlights the continuing strength of the brand and the public feeling of ownership in NSEW, as seen in the swathes of new activity across the nation under the banner of NSEW.

We learnt not to have so few media features planned to pitch to the press in the run-up to the Week, these features were all in-line with our Earth theme and very integrated with one-another. For 2011 we aim to have a wider suite of ideas, all with different themes, and work more closely with editors to ensure that ideas are newsworthy.

10. To increase the number of scientists/engineers involved in NSEW for the first time.

2009 saw a total of 3,130 scientists/engineers participating in NSEW, our aim was to increase that number in 2010, but also to find out which ones were participating for the first time. Participation can either be as 1) presenters at NSEW events, 2) through taking part in or supporting NSEW mass participating activities.

Presenters at NSEW events:

From the 937 organisers who filled in evaluation forms, the events involved 5802 presenters (an average of 6 per organiser). If extrapolated to the total number of organisers (947), this suggests there was an estimated 5863 presenters involved in NSEW 2010, a 4.9% increase on 2009 estimates.

394 presenters completed evaluation forms in 2010, 47% said they are employed as scientists or engineers (up from 45% in 2010). 89 engineers and scientists said they were presenting during NSEW for the first time (22.5% of total presenters).

It can be estimated that a total of 2755 scientists or engineers were presenting during NSEW 2010 (47% of 5863), with 1319 presenting for the first time.

Supporting NSEW mass participation activities – What on Earth Project:

52 experts got involved in What on Earth Project this year, it can be assumed that they were getting involved in NSEW for the first time.

In total, this means there were 2807 scientists/engineers estimated to have taken part in NSEW 2010, a 10% decrease on 2009, with 1371 (49%) taking part for the first time. A greater effort will be made for 2011 to create a project specifically for scientists and engineers to encourage greater numbers to participate for the first time.

2. PROCESS OBJECTIVES

Identifying ways to improve the methods in which NSEW is delivered

1. To support and encourage an improvement in the quality of NSEW events

The NSEW Team support event organisers with a variety of online resources and face-to-face information sessions to encourage best practice in the management of NSEW events.

Event Quality Rating	2009 (%)	2010 (%)
Organisers: Event Success		
Very	81.70	81.65
Fairly	8.00	16.40
Not very	4.50	1.15
Not at all	5.80	0.80
Attendees: Enjoyable Rating		
Very	69.12	72.83
Fairly	24.23	21.11
Not very	0.83	2.27
Not at all	0.12	0.35
Don't know	5.69	3.44
Attendees: Interesting Rating		
Very	75.29	73.06
Fairly	18.78	19.07
Not very	0.64	1.46
Not at all	0.12	0.23
Don't know	5.17	6.18

The data shows that organisers have rated event success to be only marginally higher in 2010 compared with 2009 figures. Attendee ratings of enjoyment and interest have remained similar. While there is little improvement from 2009 figures, the figures do suggest that the majority of NSEW events are very successful, enjoyable and interesting.

When looking at such a broad approach to public engagement, such as NSEW as a whole, it would be very difficult to achieve a near perfect level of event success and ratings of enjoyment and interest as audiences vary

considerably from event-to-event. It should be noted that not all events can cater for everybody, as attitudes to science across the UK population are so varied.

It is interesting to note that only 19% of organisers used support from the NSEW team; of those 67% stated support as very useful, 27% as fairly useful and 5.5% (11 respondents) as not at all useful. This shows that there is some improvement to be made in the quality of support offered by the NSEW team for 2011, and ways to achieve that will be identified.

NSEW Event Awards

To further encourage and support particularly well organised, delivered and evaluated NSEW events, we once again ran the NSEW Event Awards in partnership with EngineeringUK. A total prize fund of £4000 was awarded to

winners in five event categories. The aim was to not only recognise and support those organisers who create exceptional events, but also to provide a focal point on the NSEW website of event case-studies as examples of best-practice, innovation and originality.

Winners in each of the five categories were as follows:

- Best Engineering Event: Berkshire EBP (TEENTECH 2010)
- Best Science Event: FrogLife Trust (Under the Surface)
- Outstanding Contribution: Jill Collin, Thomas Hepburn School
- Best Primary School Event: Willow Brook Primary School & Nursery (School Science Week – Earth)
- Best Secondary School Event: St John's School Marlborough (Transport – Past, Present and Future).

A total of 100 event organisers nominated themselves for the events this year and splitting the school category into two has allowed us to distribute award money and recognition more evenly between two schools rather than just one. The awards have been very successful again in highlighting key events, and should continue in 2011 with more promotion of previous winners to encourage both more uptake from organisers and better quality of events.

2. To ensure that all NSEW resources and activities are inclusive, non-discriminatory and accessible

Marketing materials are printed and distributed on a first-come-first-served basis, and in 2010 were aimed to a varied audience. Bookmarks were for event organisers to distribute and while stickers were designed to appeal mainly to primary school-aged children, they were also seen as fun by adults. The design was neutral, in English and based on an 'Earth' in the form of a cartoon. A Welsh version of the NSEW logo was produced to appeal to the Welsh-speakers, and the Welsh Regional Officer worked hard to ensure that Welsh-speakers were included by producing bi-lingual marketing materials for specific projects (school grants, information sessions).

The NSEW online shop, help-guides and online programme are all provided in English and provided online only for ease of access. The online programme has received some constructive criticism throughout the campaign, and an investigation will be carried out into making it more accessible for both event organisers and potential event attendees.

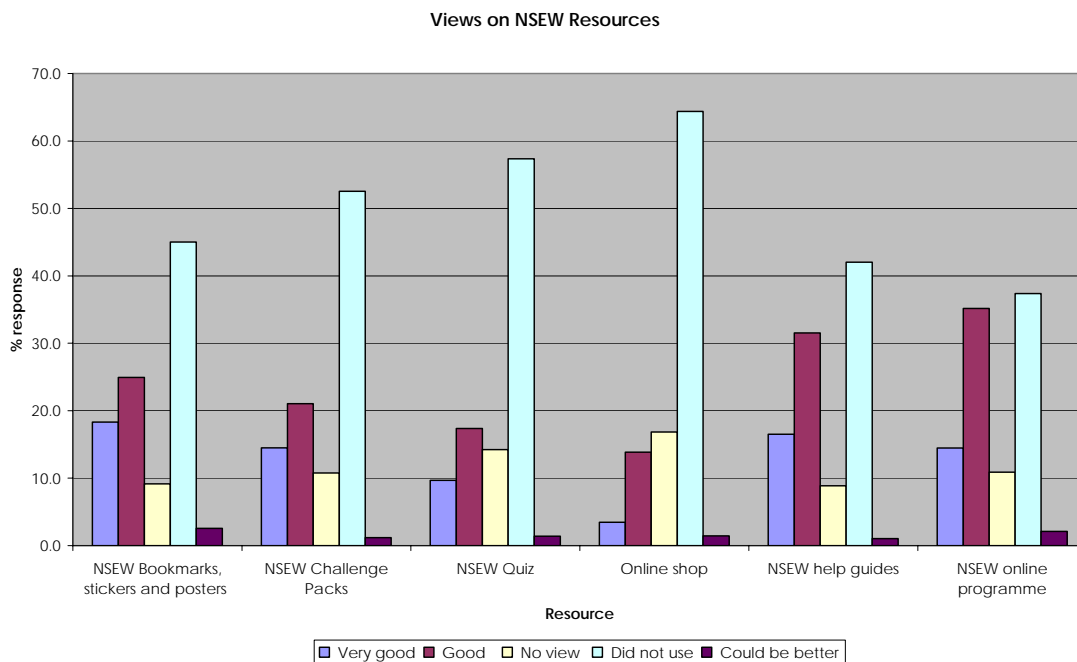
The NSEW Activity Pack Series traditionally targets Primary school-aged children, we have received feedback throughout the campaign that there is not much for Secondary School-aged children (although "Rockin' Crystals" was aimed at Secondary School-aged children in 2010) and children with Special Educational Needs. A new Activity Pack aimed at Special Educational Needs will be compiled for 2011, and more will be done for Secondary School-aged children.

In 2010, the “Biodiversity Information and Activity Pack” was aimed at the English, Scottish and Irish Curriculums. The partnership with Fifi and the Flowertots provided activities for pre-schoolers which linked in with this year’s What on Earth Project, these received a large number of downloads.

Activity Pack downloads have decreased by 26% in 2010, this is due to the majority of resources being placed in a more secure area of the NSEW website. We are looking at ways to keep this secure area but make it easier to access for 2011 to ensure downloads return to 2009 levels.

More can be done with all NSEW resources and marketing materials in terms of inclusivity, but this would involve a substantially higher budget to make them accessible to a wide variety of ethnic minorities and Welsh speakers across the UK.

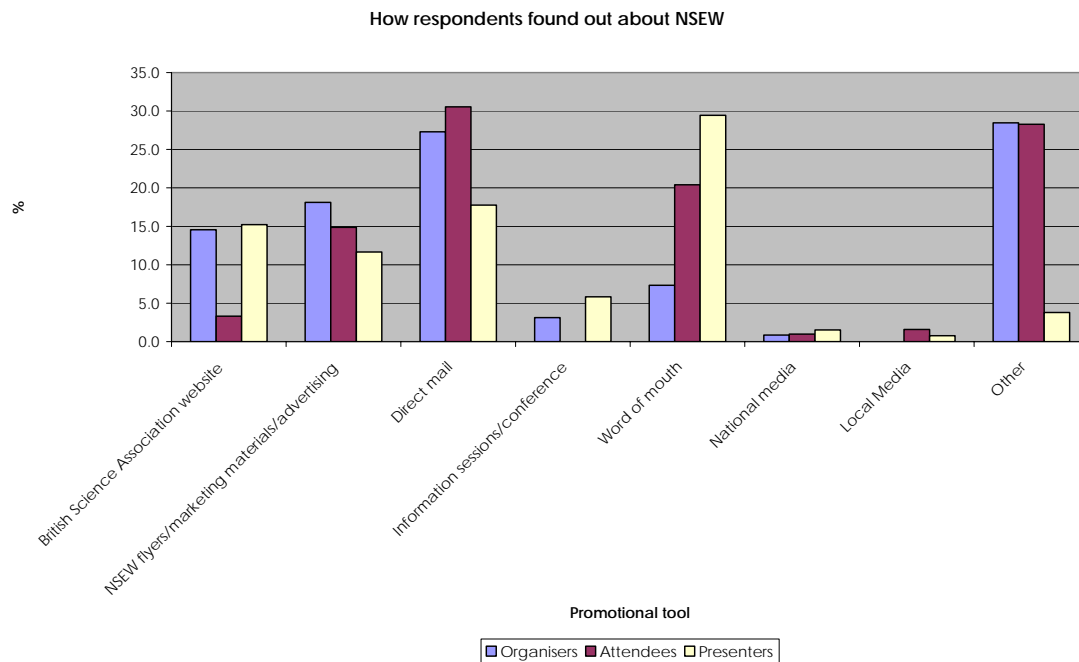
3. To increase the impact of NSEW resources e.g. Activity packs and marketing materials.



The graph shows that the majority of organisers who responded to the evaluation did not use the NSEW resources available. With the exception of marketing materials, all resources are available online to download with no limits on the number that are made available. The high number of respondents who answered ‘did not use’ demonstrates that there needs to be a greater promotion of the benefits of the resources, and to obtain more feedback from organisers who did use them to find out how they can be tailored further to their needs.

Marketing Materials and other tools:

In 2010, 190,000 bookmarks were printed and distributed to just over 800 event organisers for use at their events; this is up on figures in 2009 and helped ensure increase visibility of the NSEW brand. Promotion of NSEW always takes a broad approach in order to reach a wide and varied audience, and 2010 has been no exception. Though it would be appropriate to hone-in on successful methods of communication for each of the three target groups to ensure greater impact.



This graph shows that marketing materials fare comparably against other promotional tools, accounting for 18% of organisers (down on 24% from 2009), 15% of attendees and 11% of presenters. It is hoped that these materials can help inform both direct mail and word-of-mouth and if the budget can be secured for 2011, it is recommended that more bespoke marketing materials be produced to ensure they reach a wider variety of audiences.

Organisers:

Direct mail appears to be the most effective tool to communicate to organisers, followed by the British Science Association website and NSEW advertising in general. Since the NSEW contacts database has more than doubled during the 2010 campaign, it can be assumed that these approaches have been successful to inform new organisations.

Attendees:

Direct mail and word-of-mouth are the two single most powerful tools in generating awareness of NSEW amongst attendees, followed by marketing materials and advertising. Despite the cost involved in employing a PR agency, national and local media fail to turn readers into event attendees; however it does have the potential to reach a much wider audience and raise more

general awareness of the campaign and associated venues than any of the other methods. It is recommended that this be continued in 2011.

Direct mail and word-of-mouth (from the organisers themselves) can be better informed by more effective marketing materials and further targeted communication to organisers. Investigation should also continue on the effectiveness of forms of new media to facilitate word-of-mouth.

Organisers also need to be further informed about how to utilise local media to increase awareness of both their event and NSEW (only 22% of organisers said they had achieved local media coverage). To achieve this, a NSEW Media Pack, in addition to the standard Guide to Publicity, will be put together for NSEW 2011 in January and distributed to organisers.

Presenters:

Direct mail and word-of-mouth again appear to be a very effective way of reaching presenters. There are fewer science and engineering presenters in 2010 compared with 2009, so there should be more direct mail to potential hot-beds of talent (Universities) to encourage experts to turn presenter/event organiser during 2011. A separate survey of Sciencelive users (the British Science Association's online directory of presenters) is being carried out to determine its effectiveness and suggest improvements.

Activity resources:

Both the NSEW Quiz and Activity Pack feedback was mainly "Good". To improve this for 2011, the Activity Pack series will need to be revamped/reformatted based on feedback from this and previous years to provide children with more of a "wow" factor, in addition to communicating key concepts. Some of the feedback from this year's activity packs included:

"It's been a great activity pack, full of stimulating ideas which work!" – *What on Earth*

"The pack and previous packs provided inspiration/stimuli for the activities we decided to carryout" – *What on Earth*

"The activities we used from the pack were very useful and supported our teaching" – *Colour Chaos!*

"Great having a pack to work from!" – *What on Earth*

Support resources:

Support resources such as the programme and the 'how-to' guides were used more widely than the activity and marketing resources. Work will be carried out on the online programme to make it easier to use for 2011.

4. To increase the use of the NSEW logo at events and on marketing materials

Use of the NSEW Logo by organisers	Yes (%)	No (%)	Don't know (%)
At Event	56.6	40.9	2.5
On marketing materials	37.9	57.1	5.0
On website	16.2	82.7	1.1

The data suggests that more effort in particular needs to be made to encourage organisers to place the NSEW logo on their respective websites and marketing materials. There is no data on this from 2009 to compare to, but the inclusion of web banners and clearer guidelines on the use of the NSEW logo (in English and Welsh) in the 2011 Media Pack, distributed at the right time of year, should help to encourage organiser to use the logo more.

Visibility of the NSEW logo on all associated events and activities is important to increase awareness of the campaign. Encouraging more organisers to use the logo on their own marketing is an easy way to ensure greater visibility and higher awareness in the future.

5. To respond to organisers feedback to improve our support system and increase satisfaction

In addition to this evaluation report, qualitative data from organisers will be collated and responded to in the form of a separate report with feedback feeding directly into improvements in NSEW support.

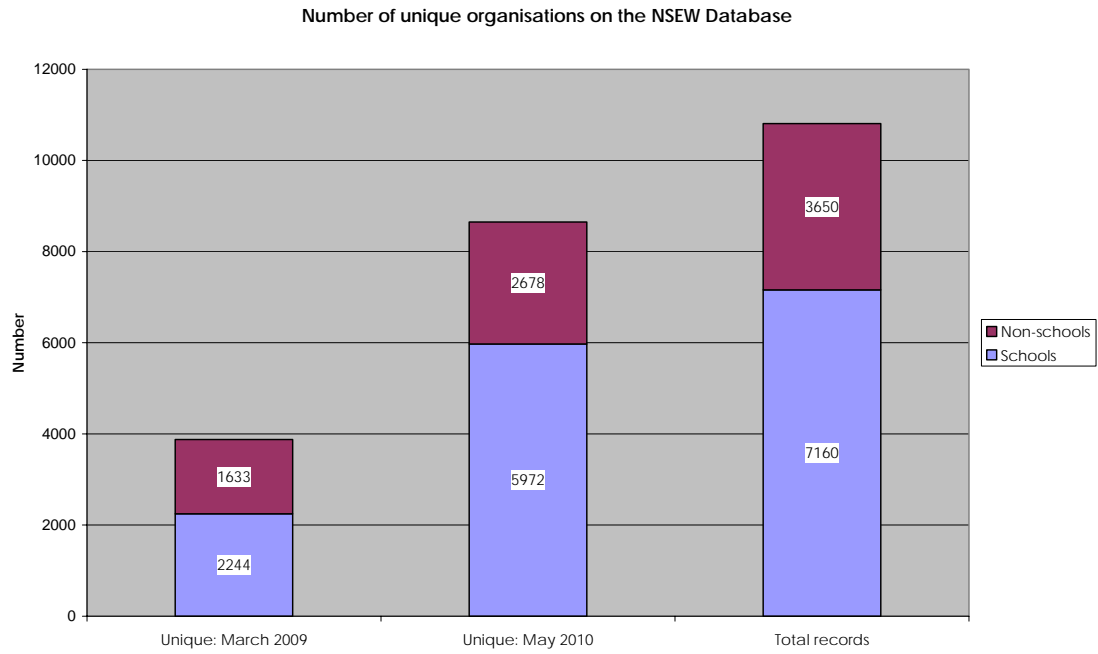
6. To increase number of organisers on database (Including those just interested in attending events)

The NSEW database is the key to ensuring direct mail reaches the maximum number of interested organisations. By placing all NSEW activity resources behind a secure area, which requires users to submit their contact details before accessing, the NSEW database has more than doubled from March 2009 to May 2010.

As shown by the graph below, at the end of NSEW 2009 we were able to make direct contact with people in 3877 unique organisations who had opted in for direct mail. By May 2010, this number had increased by 4773 (123%) to 8650 unique organisations; this is based on a search of unique postcodes in the database. In total, there are 10,810 records in the NSEW database, with 66% of these representing school-based contacts.

To cater for those just interested in attending events, a new sign-up procedure is being put into place to allow users to categorise themselves. Existing users will be contacted before the run-up to NSEW 2011 to complete a short survey allowing

the database to be split into those organising events, and those attending events to allow for a more targeted approach to direct mail.



3. DEMOGRAPHIC OBJECTIVES

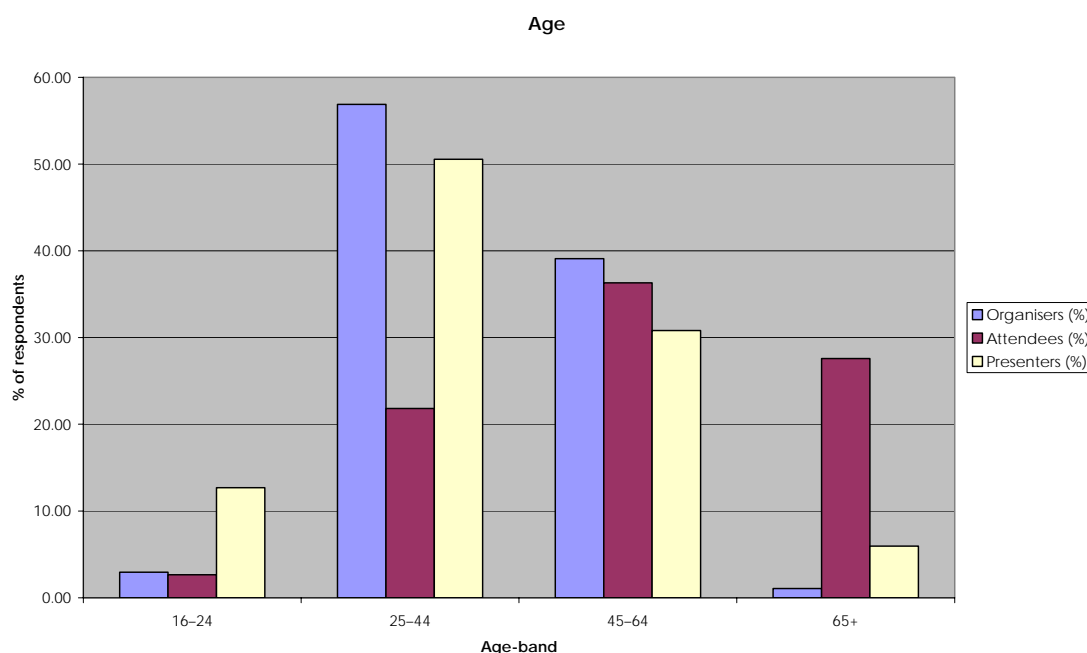
Looking at who is organising, attending and presenting in NSEW events and activities

1. To target 16–25 year olds to increase attendances and number of organisers

All organisers, attendees and presenters were asked about their ethnic origins and their age, in order to find out some basic demographics for NSEW. The graphs below demonstrate that while the majority of NSEW event organisers are between the ages of 25–64, attendees range more in age with a strong contingent of 65+, while the majority of presenters are 25–44.

There are far fewer 16–25 year-old attendees and organisers, but interestingly 13% of presenters fall into this age-bracket. These could be young science communicators/scientists or engineers. The number of attendees in this age bracket is significantly down on 2009 figures (25% of adult attendees in 2009).

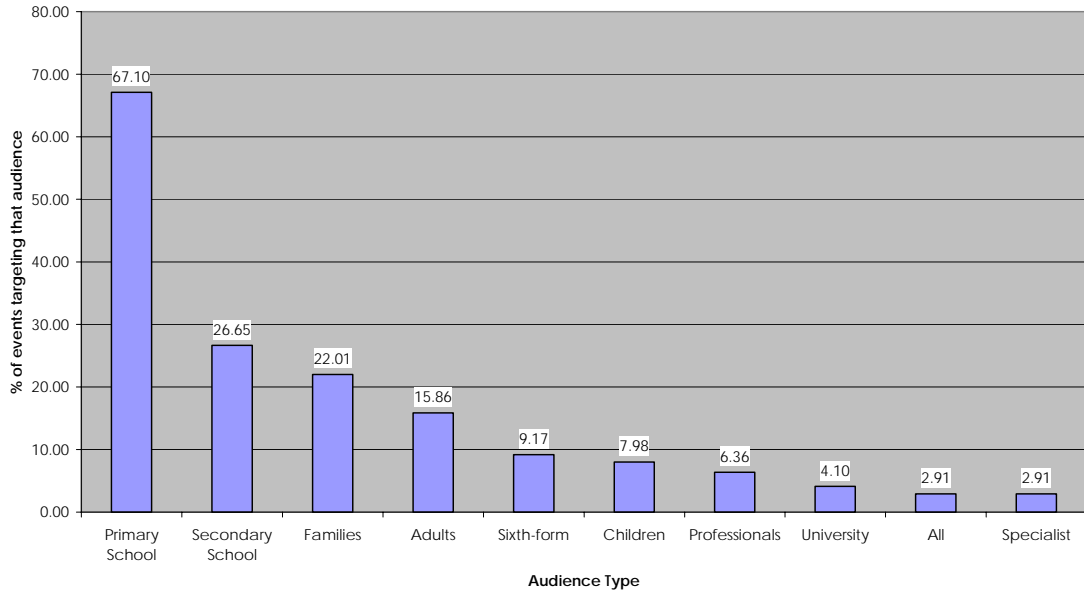
By looking at a breakdown of audience type, it's apparent that a higher percentage of events are targeted to primary and secondary schools rather than sixth-form, adults and professionals, where the 16–25 year olds are likely to appear.



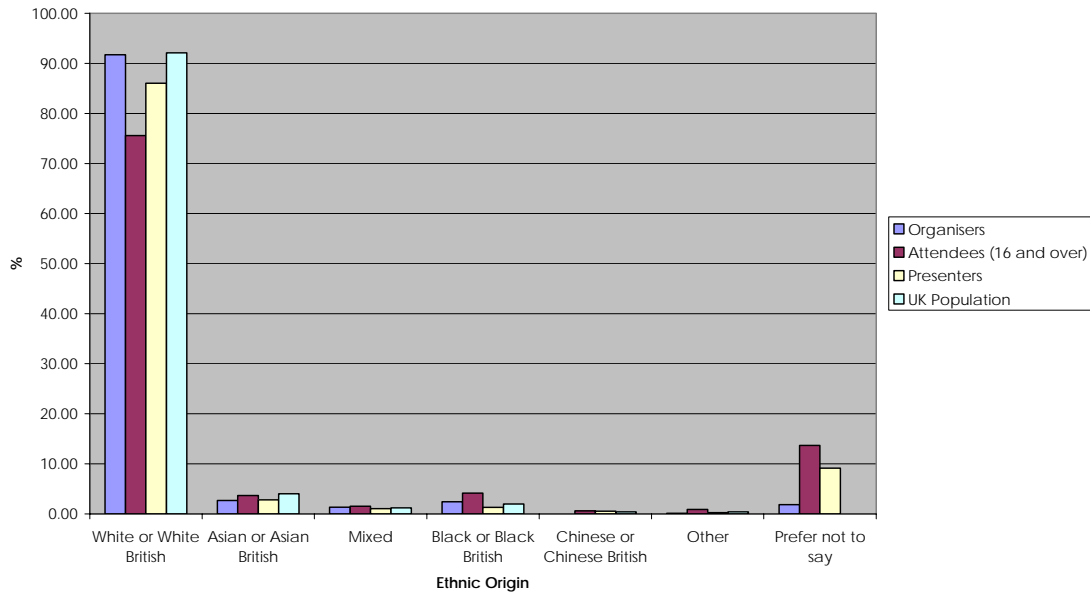
Further effort needs to be made in 2011 to target venues/organisers likely to be able to reach younger adults and encourage them engage with this age-group during NSEW. While this is a demographic objective of the British Science Association, since we do not organise the events ourselves it becomes reliant on a third-party in order to achieve it. By communicating this objective more

effectively through direct mail to the NSEW organiser database, and directly facilitating engagement through a series of out-of-the-box style activities, we should hopefully see an improvement on these figures in the future.

Audience Breakdown for NSEW Events



Ethnicity



3. CONCLUSIONS AND RECOMMENDATIONS FOR 2011

The number of events and attendees in 2010 was higher than expected (over 20% more registered events); this is largely as a result of increasing the size and reach of the NSEW contacts database in the run-up to the campaign. The numbers reached are very large and the 'Week' does have a national impact with a very positive response. It is recommended that for 2011 we aim to maintain numbers of participants and attendees. Some regions have seen a fall in event numbers, and further networking, information sessions and improved direct-mail to target organisations in those regions should help to improve the situation. There were slightly fewer engineering events in 2010, despite the theme being an all-rounder.

Awareness amongst the public is comparable to figures in 2009, considering the budget of NSEW the current level of awareness should not be undervalued as it forms a significant proportion of the population and shows the campaign is excellent value for money. In 2011 we will look into ways of generating awareness surveys to also look at the 'impact' of NSEW by forming a simple gauge for the public's attitude to science.

While the Endanger Ranger Competition engaged over 16,500 school children, the flagship mass participation project, What on Earth, was not as prolific as hoped and the late arrival of spring is largely to blame for this. Lessons from 2010 dictate that next year's mass participation project should:

- have an easier-to-recognise brand that we can simply amend each year (i.e. the Nation's Big Experiment)
- be a simpler concept and cheaper to produce
- have a full SWOT analysis carried out before-hand and identify potential pitfalls with a contingency plan in place to overcome them
- attract sponsorship
- have a competitive element that ties in with regional news agendas
- achieve celebrity endorsement
- have the ability to engage a wider population through Facebook/similar online or mobile media
- have free items leading to viral marketing
- have good collaborations with organisations who can drive traffic to the website, and attract new audiences to the NSEW homepage.

We will also look to completely differentiate mass participation projects and media features, we hope this will increase their media potential as a suite of stories and activities.

The NSEW School Competition certainly now has the recognition among schools to attract sponsorship, and we will endeavour to seek this for 2011.

Fewer scientists and 16-25 year-olds took part in NSEW than expected, with figures slightly down on 2009. It is recommended that an activity be put together

specifically for young scientists based at Universities, and to work with a trade-press media partner to help promote the competition across the UK.

The NSEW homepage is receiving more web traffic, with visitors up by 19% compared to 2009 figures. The What on Earth site received more traffic-per-day than the NSEW homepage, which demonstrates the need for a separate microsite as a hook to attract the public's interest and drive traffic to the NSEW event programme.

Resources produced for NSEW still prove very popular with more downloads of the 2010 packs than those offered in 2009. Existing activity packs need to be added to/updated to extend their life-cycle and specific audiences such as secondary school-aged pupils and those with Special Educational Needs need to be targeted in 2011. The new taster pack should be posted on more sites online to promote the activity packs and drive more traffic back to the NSEW website.

Marketing carried out for NSEW continues to play an important role, with promotional materials and direct mail being integral to the broad approach that attracts both event attendees and new organisers. More can be done to encourage public venues, such as libraries and museums, to display promotional materials such as bookmarks and posters, and more efficient methods of distribution will be looked at for 2011 (i.e. – strengthening our ties with Oxford University Press Bookshops). Word-of-mouth is particularly important amongst attendees and presenters, and it is recommended that a low-budget advertising campaign be put together through Facebook and other forms of new media to help spread the word. A NSEW Media Pack for organisers will be put together in January 2011 and distributed to encourage more organisers to place banner-ads and logos on their websites and marketing materials.

Regional media coverage was higher this year in both press and online, and the higher number of regional than national press articles shows that media strength is moving further towards regional coverage. A 'smarter' suite of media-interest features should be put together for 2011 that target tabloid interest, such as simple surveys of public attitudes to scientific topics, in the hope of gathering more national coverage throughout the campaign. We aim to steer clear of national awareness raising initiatives, such as 'biodiversity' and 'Darwin Year' as these produce an overcrowded market and fails to give the NSEW brand the opportunity to thrive and grow.

To help encourage and support high-quality events we continued to run the NSEW Event Awards this year, sponsored by EngineeringUK. We awarded events in 5 categories and have a good spread of different event types to offer as case-studies to inspire organisers.

The Small Grants for Schools Scheme for NSEW was successful in awarding funds to 444 schools in challenging circumstances across the UK. It is recommended

that in 2011 this be rebranded as a 'kick-start' fund and the amount offered be standardised at £200.

The NSEW contacts database has more than doubled during the 2010 campaign, furthering our reach through direct mail. For 2011 it is recommended that we streamline the event registration process and event programme for ease of use, in addition to dividing the database into event organisers and interested members of the public.

About this report

This report was put together by the National Science & Engineering Week Team at the British Science Association for National Science & Engineering Week 2010.

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