

# **sciencehorizons:** **Interim evaluation findings**

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## I will cover...

- What happened overall, and some statistics
- The evaluation research so far
- The main findings from each strand of the programme
- Some overall findings and conclusions so far.



## Strand 1: Deliberative panel

<b>Type of event</b>	<b>Number of participants</b>	<b>Type of participants</b>
<p>Deliberative workshop with same group of people over 2 separate full days (Saturdays)</p> <p>Programme designed and delivered by core sciencehorizons team</p>	<p>31 public recruited: 31 attended the first day; 27 attended the second day</p> <p>Plus 2 scientists from local universities and 4 experts to answer specific issues identified by participants</p>	<p>Recruited as a cross-section of the public, with no formal background in science; plus scientists who made input and joined in with some discussions</p>

## Strand 2: Facilitated events

<b>Type of event</b>	<b>Number of participants</b>	<b>Type of participants</b>
<p>Facilitated workshops run by science centres, museums, schools, Women's Institutes etc</p> <p>36 events (approx 2 hours) run by 18 different organisations</p> <p>Promoted through 4 BA working lunches, email networks, sciencehorizons website, general publicity etc</p>	<p>842 individual participants overall; total of 97 responses made</p> <p>The group size varied from less than 10 participants, to at least 8 groups that had over 30 participants</p>	<p>Largely those with an existing interest and involvement in science discussions and part of science comms networks or school / college groups</p> <p>Could be described as 'interested public'</p> <p>Almost all events had at least one scientist; some had 3 or 4; roles included making input, facilitating and joining in discussions</p>

## Strand 3: Self-managed small group discussions

<b>Type of event</b>	<b>Number of participants</b>	<b>Type of participants</b>
<p>Small discussion groups run informally and self-facilitated by a range of groups</p> <p>Sessions lasted about 2 hours</p> <p>No detailed data on number of events.</p> <p>Opportunity to run events widely publicised through SH direct publicity to range of groups, discussion lists / boards, blogs etc</p>	<p>Approx 2,400 individual participants; total of 392 responses (often several from the same group, especially schools)</p> <p>747 requests for packs; 4,000 packs sent out in total, plus 1,320 sets of teachers notes</p>	<p>Largest single category of responses from schools: 257 out of 392; then environmental interest groups, the WI, humanist groups and U3A</p> <p>Could be described as 'interested public'</p> <p>Almost all groups had at least one person with a science or technology background; usually as members of the group</p>

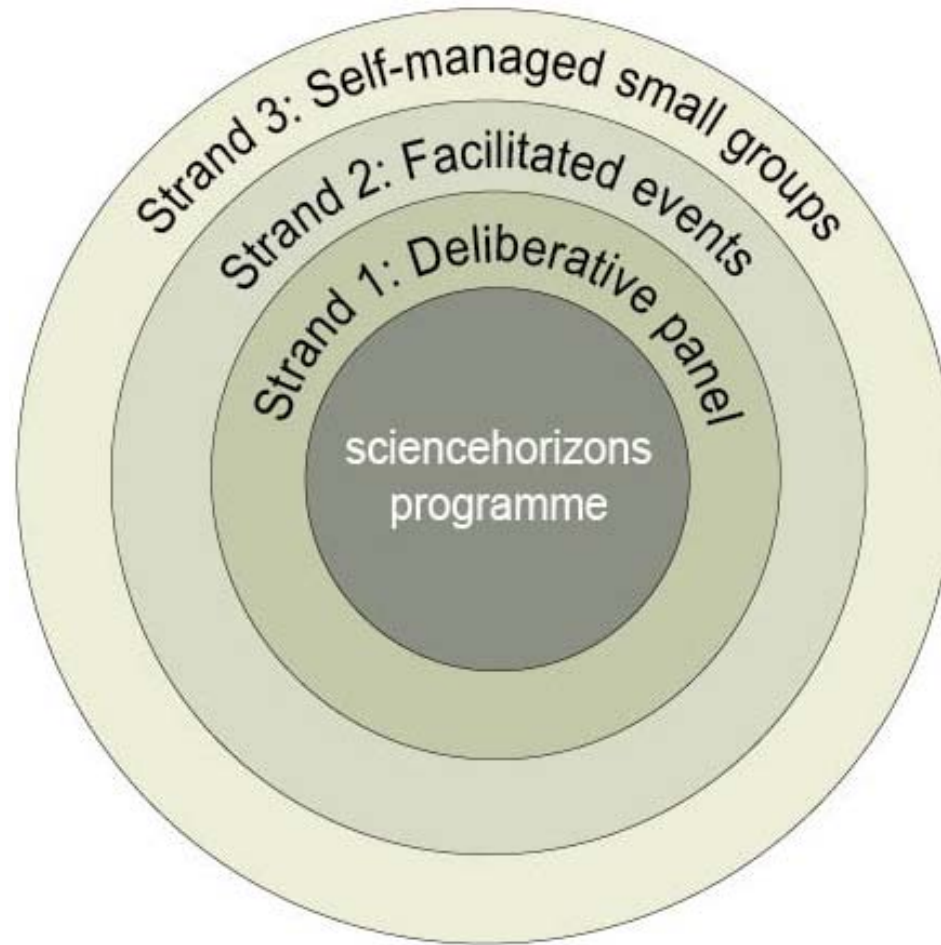
## Evaluation research

- Independent evaluation of the process overall and techniques used
- Half way through the evaluation now. We have done the following:
  - Questionnaires to
    - all participants in Strand 1: Deliberative panel (25 out of 27 returned = 93%)
    - all organisers in Strand 2: Facilitated events (14 out of 18 returned = 78%)
    - sample of organisers in Strand 3: Self-managed small groups (32 out of 78 returned = 41%)
  - Observation of all Strand 1 and sample of Strand 2 events
  - Analysis of other data
    - comments sent in with sciencehorizons responses (special question in each section on the materials)
    - data on organisers of events

So, what follows is just from this interim evaluation research and analysis.

- Next stage is interviews to cover:
  - policy impacts / value to policy writers and policy targets in government
  - further / more in depth reflections from participants, organisers (Strands 2 and 3), programme organisers, funders etc.

## The big picture



The evaluation suggests that, the closer to the core, there is:

- a closer relationship with sciencehorizons programme and organisers
- greater level of understanding of how the results from sciencehorizons were to be used
- greater satisfaction with **process**
- \_\_greater enthusiasm for more public engagement in future
- smaller number of people involved
- longer and more in-depth discussions
- greater participant learning about science and technology
- greater diversity of participants (Strand 1 recruited as such)
- more monitoring information for evaluation

## Closeness to the core does **not** seem to equate to:

- greater satisfaction with materials (Strand 3 more satisfied than Strand 2)
- more scientist / expert input
- diversity of views (very similar issues and conclusions from all strands)

## Key findings - Strand 1: Deliberative panel

### Significant participant satisfaction with process:

- 100% said they found the events enjoyable (56% strongly agreed)
- 100% said they had learnt something (56% strongly agreed)
- 96% said the events had helped them think more clearly about the issues
- 100% were satisfied with the way the meetings had been run, and 100% were satisfied with the written information provided (although 84% said they would like more information)

### The participants particularly liked:

- small working group discussions
- input from experts (they had the opportunity to identify the questions they had from the first day so scientists could be brought in on the second day to answer them).

## Immediate outcomes from Strand 1

- **Learning**

- 100% said they had learned something from being involved; 56% agreed strongly that this was the case
- 19 out of 25 (76%) said being involved made a difference to what they thought as a result of learning new things; 5 of these mentioned specifically feeling more positive and enthusiastic about science and technology as a result (unprompted)
- 11 (44%) said increased knowledge and understanding was the main thing they gained from being involved.

- **Enthusiasm for more involvement**

- 22 out of 25 (88%) thought it was **very important** to involve the public in discussing science and technology issues
- 24 (96%) said more events should be held for the public to discuss these issues

So... participants felt they had learned a lot about science and technology, and were very enthusiastic about the whole idea of more public engagement on these issues.

## Key findings - Strand 2: Facilitated events

These were very different events...

- 36 events run by 18 different organisations
- mostly science centres, museums etc but also schools, WI etc

Less obvious immediate satisfaction with process. Feedback from organisers only (14 out of the 18 returned questionnaires). Findings included:

- 5 out of 14 (36%) said feedback from participants was generally positive and that all participants enjoyed it (not all asked participants)
- 10 out of 14 organisers (71%) were satisfied that the events delivered what they hoped or expected; 3 completely and 7 mostly
- 12 out of 14 (86%) were satisfied with the support from sciencehorizons; half of these were very satisfied); 10 out of 14 were satisfied with the information provided.

### Feedback on the materials was rather less positive:

- organisers did find the stories / scenarios good for prompting discussion, but ...
- did criticise the stories (too simplistic) and the design (cartoons, 'Janet and John')
- found the questions being focused on 'likes' and 'dislikes' too simplistic for the complex issues covered
- school group organisers liked the materials more than adult group organisers

### More generally, the organisers said:

- the problems raised by the stories too complex for technological solutions alone: needed social, political etc change as well to address them.

This was the idea of the scenarios, but organisers did seem to feel that they should ensure that the discussion focused on the technologies.

This feedback is not as enthusiastic as from Strand 1 participants, but it is still good positive feedback in terms of the support from sciencehorizons, and the extent to which participants enjoyed the experience.

The only real suggestions for improvements offered were:

- more help on how to organise events; such facilitated deliberative dialogue seems quite new for many organisers
- to ask for more time i.e. longer between the announcement of the programme and the deadline for comments

## Immediate outcomes from Strand 2

- **Dialogue with scientists**

- major element of this strand: almost all groups had at least one, some 3-4, scientists
- scientists acted in a variety of roles: giving presentations, facilitating groups, doing Q and A sessions, taking part in discussions with the public
- from observation: worked very well in the events observed
- from observation: participants really like a range of viewpoints

- **Working together**

- Strand 2 delivered mostly through science centres, museums etc who already network
- strand was launched with a series of 4 BA working lunches, which helped networks and provided initial information
- 10 organisers (71%) said they did feel part of a national project; 3 of these said very much so. 3 others said they did not feel very much part of it - so quite a mixed sense of feeling part of the national project
- 6 specific collaborations were identified

- **Enthusiasm for public engagement**

- 12 out of 14 (85%) felt it was very important to involve the public in discussions on science and technology
- 11 out of 14 (79%) said more events of this sort should be held for the public

One comment from a respondent was:

*"Are they really informative for policy-makers? Is it an exercise done for appearance only?"*

The evaluation to date cannot answer about the value of the programme for policy-makers - that is the next stage - but it has already had significant value for participants, and to organisers in terms of developing experience of new techniques of public engagement.

## Key findings - Strand 3: Self-managed discussion groups

The strand was very different again:

- mostly non-science groups running events
- quite a lot of schools
- group size was smaller

The level of satisfaction was slightly higher than Strand 2:

- 28 out of 32 (88%) were satisfied with the information and instructions provided by sciencehorizons; 12 (38%) were **very** satisfied
- 28 out of 32 (88%) also found it easy to have a discussion using the pack / website; 11 of those (34% overall) found it **very** easy

Feedback from Strand 3 is also more positive than Strand 2 on the materials provided. Based on 222 comments registered with sciencehorizons in the general responses made (a separate question was included in the pack):

- more than twice as many (76) feedback comments found the materials were interesting and stimulated discussion, compared to the 32 who complained about the materials (simplistic, immature
- more than twice as many (13) just said they enjoyed it, compared to the 5 who just said they did not enjoy it.

## Immediate outcomes from Strand 3

- **Dialogue with scientists:**
  - almost all groups had at least 1 person with a science and technology background
  - their role was generally to take part as a member of the group
  - this seems to have worked well
- **Working together:**
  - the Strand 3 groups largely understood the process:
    - 25 out of 32 (78%) said they understood the purpose of the process
    - 13 (41%) were clear about how the results were used
  - there is no data from Strand 3 about collaboration between group organisers
- **Future engagement:**
  - 24 out of 32 (75%) said they would like to have another discussion on science and technology; only 2 said they did **not** want to.

## Overall findings so far

- **Satisfaction:**

- Strand 1 was the 'gold standard' (longest and most highly resourced), and participants most satisfied and learnt most
- Strands 2 and 3 more critical of materials and process
- differences also within strands: in Strand 2, school group organisers more positive about materials than adult group organisers

- **Diversity of participants:**

- Strand 1 explicitly recruited a diverse group
  - Strand 2 tended to be those already engaged in science and technology
  - Strand 3 were non-science groups but all did seem to have an existing interest
- Overall on diversity, therefore:
    - some level of diversity in terms of age, gender etc etc overall
    - less diversity (apart from Strand 1) in terms of existing knowledge and interest in science and technology
    - Strands 2 and 3 reached the 'interested public' rather than the 'general public'

- **Dialogue with scientists:**

All three strands showed good and interesting practice in bringing together scientists and the public:

- Strand 1: presentation from scientists on issues identified by the Panel participants
- Strand 2: wide range of roles including presentations, facilitation, joining in discussions
- Strand 3: mainly scientists appear to have been group members

- **Cohesion and networking:**

- some collaborations between science communicators in Strand 2
- less overall collaboration between science communicators than hoped and expected originally
- sense of engagement in national project strongest in Strand 1 and least strong in Strand 3; but still a sense of participating in a national programme throughout

- **Learning:**

- the group with least initial knowledge in science and technology (Strand 1) seem to have learned the most, and valued that learning most highly; but knowledge and information clearly developed in all three strands
- a range of opportunities was provided for science communications and other organisations to experiment with and learn from a range of forms of public engagement
- demand expressed for more help with designing and organising deliberative dialogue events in future

## **Some issues raised by the evaluation so far:**

- the demand and need for training in facilitation and process design for those running these events;
- the need for an ongoing programme, rather than a time-limited, short term programme as many organisations (especially voluntary groups) need time to plan and set up these events;
- the need for closer targeting of materials and processes to different audiences (especially the possible separation of schools and other groups);
- the need for better monitoring of who the groups are and what their processes are, in order to better understand the validity of the conclusions they come to.
- the importance of clarifying the extent of influence that participants' discussions will have on policy-makers or others;

## Next steps

- evaluation research continuing
- your discussions here today on some of these issues ...

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