

Response to Office of Science and Technology's 'Science in Society' Consultation

Summary of discussion at The Science Communication Conference

May 2003

Conference jointly organised by The BA and The Royal Society



Science Communication Conference Response Office of Science and Technology's 'Science in Society' Consultation

Introduction

This report documents feedback on the Office of Science and Technology's 'Science in Society' consultation session gathered from delegates at the Science Communication Conference, jointly organised by The British Association and The Royal Society in May 2003. (The views expressed in this document are not necessarily those of The BA and The Royal Society, who have each submitted individual responses to the OST consultation.)

In the interests of realising the benefits of increased research spending, the government has allocated £1.5million to the OST for Public Engagement in Science and Technology. The OST approached the BA for advice on how they could assess science communication activities in the UK, how effective these are, how to promote collaboration and disseminate best practice in the science communication community and how to govern their programme of work. The OST's consultation paper was based on 11 recommendations made by the BA. The following proposed action items were presented and discussed at the conference:

- A database of science in society activities;
- Regular national surveys for determining the needs of the public;
- A needs analysis to bring together these first two items and identify gaps in provision;
- Activity evaluations to establish best practice for evaluating science in society activities;
- A yearly media summary to provide the background against which to evaluate the impact of particular events;
- An annual conference for organisers and funders of initiatives;
- A scheme consolidating small, medium and large grants; and
- A small, independent group to advise the OST on an ongoing basis.

The OST is also inviting comments on its five proposed funding priorities: science in society, widening participation, collaboration and networking, good practice in science communication and science in the media.

Science and engagement in science are defined as broadly as possible for the purposes of the OST's consultation. Science includes science, engineering, technology and maths. Different types of public and all sections of society are also considered.

As it is not easy to engage individuals in formal consultations of this type, the OST has actively identified and consulted organisations that could represent the views of the wider public. One conference delegate suggested that other methods of public consultation should also have been pursued in order to capture the full range of the public's views.

The comments and feedback of conference delegates concerned five broad issues: the proposed activities database, the regular national public surveys and needs analysis, standards and evaluation, funding for science in society activities, and the OST's funding priorities.

The activities database

Four main points were raised with regards to the proposed activities database. The first related to the fact that the database could duplicate ongoing projects, the second to the difficulty of capturing all of the ongoing science communication activities and the third was a request for the database to include information on the impact of projects. Finally, the database should capture information about widening participation issues.

A number of conference delegates raised concerns regarding the fact that the activities database might duplicate the efforts of ongoing projects. One such project is the Northwest Science Alliance, which celebrates the range of work that is being done in that region, and another is SETNET.

There were also concerns that it would be difficult for the activities database to record the complete spectrum of science in society activities given the diversity of groups and individuals involved. Practitioners are constantly stumbling across new projects run by people who are not networked into the science communication community and the only time the wider science communication community finds out about these projects is at the annual conference. How does the OST intend to find them and record their activities? Furthermore, the definition of 'science communication activities' could be incredibly broad, covering both science in the school classroom and the latest Daily Mail editorial. What definition will the OST use and how will they decide what information to collect in the activities database?

The database should capture the impact of an activity after its completion, for example the fact that someone has gone on to study science or a local company has given money to a university for research. The information would be useful to the science communication community in persuading scientists that their involvement is valuable for themselves, their institutions and their research.

The activities database should monitor the differences between activities that reach out to wider audiences and those 'preaching to the converted', in order to inform the science communication community what is happening with regards to widening participation.

Regular national public surveys and needs analysis

Conference delegates questioned the breadth of the proposed surveys and provided some suggestions as to areas they might cover. The overall feeling was that the surveys should capture what the public wants and how they would like to engage with science.

Previous surveys, including a MORI survey for the OST in 1999, showed that people were more likely to have an open mind about science if they understood the differences that it

makes to daily life. The OST's proposed surveys should, therefore, aim to identify the spectrum of this understanding among members of the public. The OST's proposed surveys should also cover the following two areas in order to provide information on whether or not activities are meeting their objectives:

- Scientists' views on communicating with the public should be captured on an ongoing basis in order to monitor changes in scientists' attitudes and culture. Some research has already been done into this area and the work needs to continue.
- Given the public's current scepticism about the government and industry's motives, the surveys should capture the public's perception of whether or not the scientific community and policy makers listen to them and take their concerns seriously.

Standards and evaluation

The science communication community currently undertakes a great deal of science in society activities. However, quality control and the standards of these activities are rarely discussed and the OST's proposals for evaluation were generally welcomed. Research Councils already have some measures in place to evaluate the quality of activities, but more could be done.

A request was made for the OST to make use of their evaluation exercise to define *measurable* objectives in terms of quality and quantity. These measurable objectives could act as a benchmark for others wanting to evaluate projects and could be incorporated into grant applications for science in society activities.

Funding for science in society activities

Four main issues regarding funding for science in society activities were identified. The overall budget for science in society activities was discussed, as was the issue of where funding should come from. Funding for training scientists to communicate and for acting on the feedback of dialogue activities is also needed.

The funding allocated to the OST's PEST programme is currently £1.5million and it is not yet clear whether this will rise year on year with increases in research spending. Research Councils and other government departments such as the Department of Culture, Media and Sport, which sponsors national museums, also spend large sums on public engagement. One Research Council spends approximately 1% of its total budget to accomplish their mission that scientists should communicate with the public, but acknowledged that more could be done. So has enough money been allocated to science communication and are the funds correctly balanced across different government departments and Research Councils? The surveys and needs analysis should look at spending on science communication activities and should aim to answer these questions.

The survey results should also be used to establish a common approach to funding from all of the different sectors.

The science communication community should try to engage more effectively with the industrial sector, since it spends a great deal on both research and development and science communication. The Royal Society of Arts is currently running a project in this area, which, although still in its early days, has been successful in bringing industry representatives, social scientists and policy makers together to talk about issues such as transparency, openness and risk.

Conference delegates expressed the opinion that, wherever possible, the funding for science communication projects should be embedded within relevant research projects, encouraging scientists to bring their work to the attention of the wider public. The House of Lords' Science in Society report and the European Commission also supported this view. The EC has set aside 0.5% of its budget for a science in society programme with funding embedded within research projects.

Past surveys have shown that 50% of scientists do not feel adequately prepared to communicate outside their peer group. Funding for training programmes is therefore essential. Research Councils, rather than the OST, are committed to funding these training programmes or buying into programmes from organisations such as The Royal Society. But scientists' demands for training are currently not being met. The question of when to train people was also raised – at school, university or later? Whenever the training happens it should be available to all, rather than just a few select fellows.

Methods for acting on the feedback of dialogue exercises and for informing policy makers of the results of informal consultations should be written into grant proposals. Grant proposals should also include the costs of acting on feedback.

Funding priorities

The OST's five proposed funding priorities are science in society, widening participation, collaboration and networking, good practice in science communication and science in the media. Issues and comments were raised on the overall direction of OST's funding and on the networking fund in particular.

The overall direction of the funding priorities was questioned. The funding priorities focus almost exclusively on activities that happen outside the classroom, but might it be more productive in the long-term to concentrate on our children's education? Better education in the science subjects, with teaching in how to debate, would reduce the need to re-train scientists later in their careers. It would also create a scientifically literate society that can communicate and can appreciate what science is about. Some examples of initiatives already going on in this area were identified; for example, STELAR ran a project in 2000 to involve schools in debate and discussion, but found that teachers did not have time to devote to these projects. Without support for and investment in this area, the science communication community will be repeating today's discussions in a few years' time.

The networking fund was welcomed. The multiplicity of funding bodies can overwhelm practitioners searching for the right place to apply for a grant. The networking fund could be used to coordinate the publication of information regarding who to approach for funding for different types of project, whether £500 for a chemistry project or £100,000 for a bioscience project.