

Department for Innovation, Universities & Skills

Grant Funded

Nanodialogues: EA

A people's inquiry on nanotechnology and the environment

Context and aim

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The Nanodialogues experiment, run by the Environment Agency (EA), took the form of a people's inquiry on nanotechnology and the environment, looking specifically at nanoparticles and land remediation. The project was the first of four experiments in public engagement around nanotechnology delivered by Demos and other partners over two years between January 2005 and spring 2007.

Inspired by the necessity to clean up the huge Olympic site in East London and the fact that in other countries nanoparticles are already being used in land remediation, the EA was keen to find out how people in the UK would respond to the idea of nanotechnology in their own environment.

The aims of the project were:

- to see how members of the public understand novelty, uncertainty and regulation around nanotechnology
- to give a small group of the public the opportunity to contribute to shaping policy on new technologies

The process

The dialogue was based on a Citizen's Jury model, which provides a forum for deliberation with experts. However, there were some key differences with

This 'socially framed' evidence adds weight to the existing Government position on the use of nanoparticles in environmental clean-up... Our participants came from a very different place to the experts yet they came up with similar recommendations that are, for the most part, already being addressed.

John Colvin, the Environment Agency

this experiment. Demos was keen to move away from the traditional adversarial language of the courtroom where 'charges' are brought, 'witnesses' called and a 'verdict' reached. Instead, Demos created a more collective exploration of the context and content of nanotechnology by members of the public and scientists.

The dialogue was designed to be small with the participants able to have very detailed discussions over a longer period of time than is normally possible. The approach of bringing the same group of people together more than once, and allowing them to reflect on the initial discussions, helped to even out the differences in the levels of knowledge and power within the group.

Alongside members of the public, in the group were people representing different perspectives in the debate. These included academics and scientists, and members of environmental pressure groups.



Vital statistics

Project delivery organisations: Demos and the Environment Agency

Duration of process: 8 months (September 2005 to April 2006)

Number of participants: 13, all participating in three Saturday workshops

Cost of project: £60,000 including the cost of internal EA staff time

Key impacts

- Influenced the EA's policy on the use of nanotechnology in land remediation
- Fed into the work of the Government's Nanotechnology Issues Dialogue Group (NIDG) and the Sciencewise-funded Nanotechnology Engagement Group (NEG)
- Final report was delivered to Defra by a delegation of citizens

This project was funded through open competition, not commissioned to provide input into a live policy area.

Sciencewise, funded by the Department for Innovation, Universities & Skills (DIUS), is designed to help policy makers engage with the public in the development of policies on science and technology across Government. To find out more visit: www.sciencewise-erc.org.uk

Benefits and impact

Benefits to the EA

The EA heard two clear themes come out of the discussion:

- there is uncertainty about potential contamination and therefore people are cautious in their response to this new science
- there is a need for openness and honesty about what is, and isn't known about nanotechnology

The experience gave the EA scientists a taste of upstream engagement, which was safe, professionally run and useful. The EA was one of the first organisations to embrace 'stakeholder dialogue' in the early 90s. It is therefore no surprise the EA is open to engaging the public early on in decision-making processes.

Benefits to the participants

The project was particularly well followed up, and individual participants were still engaged with the process over a year and a half after the last workshop.

Participants have spoken about the 'honour' of being invited to help influence policy and of having the opportunity to meet innovative scientists involved in this area of cutting edge research. Before this project, many felt the Government probably rarely heard the things the public had to say.

Feedback shows participants would like activities such as this one to be replicated across the policy-making arena.

How it worked

Steering group: Meetings were ad hoc throughout the project.

Dialogue process: Created with the EA team (and appointed an evaluator) between September -December 2005.

Participants: Recruited from East London in December 2005.

Workshops: Every other Saturday in January and February 2006.

Evaluation: Took place throughout the project and for three months after the project was completed.

Report writing: The blog was written throughout with short updates after each weekend workshop.

Visits: Some participants visited the Royal Society in spring 2006 and Defra in summer 2006.

The results of the discussions forced the EA to reflect on the role of regulation of new technologies in the light of such public scrutiny. Embracing its responsibility to be transparent, the EA responded to each recommendation in its report.

The overwhelming feeling of all the participants was that they had been offered the chance to learn about something highly significant, which would impact on all our lives. This learning in itself, they felt, was of great value.

Contacts and links

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EA Project Manager: Phil Irving Project report: www.demos.co.uk/ publications/nanodialogues For an overview and reports: www.demos.co.uk/projects/ thenanodialogues/overview

The Environment Agency: www.environment-agency.gov.uk/

Learning from the process

Whilst participants were very happy to be taking part, sometimes they found the science turgid and difficult to understand. This underlined the need for good science communication. Those scientists who drew diagrams and explained the science in layman's terms, received spontaneous applause from the group.

Staff from the EA and other stakeholders were impressed with how quickly the participants learned in-depth concepts and their ability to discuss the ethical and social consequences of the potential use of nanotechnology.

The majority of participants were fully engaged; indeed, some still meet and give talks on their experience over a year and a half later.

Scepticism is likely to be encountered at some point within a dialogue. The EA's continued presence at events, hard work in translating complex science into understandable concepts and flexibility in the programme of events, all increased trust in the process.

By far the most important test, however, is whether comments have ultimately been listened to. In addressing each recommendation, the EA demonstrated willingness to engage with the hopes and concerns of the participants and demonstrate why, or why not, policy would change as a result.

What would be done differently?

Overall, the project went well. One lesson to be learned is that good science communicators must be involved in the process who can explain complex science clearly to a public audience.

Find out more at: www.sciencewise-erc.org.uk