

## **BA and ESRC Science in Society seminars 2005**

### **How does industry access and use public knowledge?**

The second seminar in the series was led by Dr Kate Burningham from the University of Surrey who was the principal investigator in a project which investigated how industry conceptualises, accesses and uses public knowledge. The project looked at the chemicals industry to explore how companies understand the concept of 'the public' and 'public knowledge' and how this relates to the ways they access and use such knowledge. A further aim was to look for evidence of public environmental knowledge making a difference to industry.

A major stimulus for the project was the increasing emphasis on public participation in environmental decision-making and public engagement in science, and also the desire for public debate to take place during the development process. There is little evidence as yet that public participation might lead to different or better decisions being made. Much of the existing research on public participation has focused on the public sector rather than the private sector.

The project carried out four case studies of chemical companies: one large and one small of both business to business and business to consumer companies and also a telephone survey of 261 chemical companies.

The case studies revealed that the companies did not think of their public as being the general public but rather consumers or neighbours of the factory, for business to consumer companies and business to business companies respectively. The public were generally considered as having environmental concerns but were thought to not actually understand the science behind the environmental issues of concern to them. Interviewees believed that public concerns are informed by the immediacy of problems and are highly dependent on media content and NGO campaigns. Overall, the companies saw the public as having concerns which need to be allayed rather offering knowledge which would be useful to the companies.

The public were thought to be ill-informed about the chemical industry itself and to have misperceptions about it. One of the small business to business companies invited the public to open days to try and dispel the impression that it is a secretive industry.

The public were mostly thought to lack any scientific understanding of the product, namely what's in it, how it's made and what the potential environmental impact of it is. However, the companies did not believe that there was a need to provide the public with this information or that the public would even request it. The companies justified this lack of public knowledge by questioning why the public would want information about complex science and by stating that it was their role to ensure a product's safety in the first place.

In terms of communication channels already in place, the companies interviewed recognised the importance of care lines and websites not only to provide information but also as a channel through which the public can contact them and ask questions. Both of the business to business companies interviewed held meetings with neighbours where the public could raise concerns, but they were also actively involved in the local community in projects such as local

development, and working with schools and charities. Dr Burningham suggested that this kind of contact might provide opportunities for developing trust and exploring issues which go beyond neighbourly concerns.

In general, the case studies showed that chemical companies weren't entirely sure that the public would want information about their company or their products. Where companies did communicate with the public, this involved product-related communication with customers or various forms of local interaction with neighbours. Communication initiated by members of the public about issues beyond the product or factory were rare and came largely from students or activists.

The survey found that companies generally recognised that communicating with the public made sense but said that it could be expensive and time consuming. There was felt to be little public demand or interest. Some of the key findings from the telephone survey are that larger companies are more positive towards the public than smaller companies and that they view the public as more influential and are more willing to engage with them.

Although communication with the public was not widespread, it was acknowledged that the public potentially could have the most effect on a company's reputation. The companies most willing to engage with the public are those for whom the public are local residents. However, despite these opinions held by the companies, the survey revealed that actual contact with the public did not match the relevance and influence that the public were recognised as having.

If companies don't acknowledge 'public environmental knowledge' or see a public demand for engagement, it will prove difficult to get them to engage with the public. This seems to be that case with smaller companies in particular.

However, changing the way industry views the public will not necessarily lead to a change in practice, which raise the question of where best to aim to increase engagement between the public and industry. Contacts with the local community may provide the best way of public engagement and companies need to think of ways they can extend any already existing contact with the public.

Gill Samuels, Chair of the Biosciences Futures Forum, and a highly experienced practitioner continued the seminar by discussing the practical applications of Dr Burningham's research and its possible implications for those working in industry. The Biosciences Futures Forum was set up to promote the discussion of these important issues and to remove the possibility of inappropriate levels of regulation. The forum is aiming to identify the advances that are likely and identify things which might have tremendous social impact and also to consider the ethical, social and regulatory questions which they raise.

Engaging with the public, whether locally, nationally or internationally is very important. Forming a relationship of trust with the public is a critical part of this engagement as trust in an institution or organisation often means it is seen as presenting a lower risk. The Biosciences Futures Forum was set up to work with both small and large companies, mostly in the healthcare sector, to address the issues of reputation and regulation with a view to maintaining the company's licence to operate and freedom to innovate. Among the forum's objectives are that companies should be informed by public opinion but not directed or governed by it.

Over the last few years, the socio-political environment surrounding industries, such as healthcare, and also the pressures exerted on them by, for example, the government and NGOs, have changed enormously. With these pressures come tougher regulations and these can have a crippling effect on smaller companies.

A company's reputation can be affected not just by facts but also by public opinion. Public opinion is basically perception and this is highly affected by the risk associated with that company. It is important that organisations and institutions are open about the possible risks posed by the service or product they provide. It is possible to manage the potential hazard of risk but impossible to completely eliminate the chances of the risk occurring. If the public is not informed about potential risk, then this can lead to public outrage. Examples of this are the controversy over genetically modified food and the BSE outbreak. It is important to address the issue of trust, possible outrage and early communication of risk because the public's perception of an institution is mainly based on whether or not they trust them.

Current risk managements practice is based on greater use of precaution, analysis of the impact of regulations, greater public stakeholder participation, more consideration for environmental and social values, and increased transparency of regulatory strategies and decisions. The regulator is also more accountable and risk communication strategies are more thought out. Science now plays less of a role as scientific results come increasingly under question and scientists are considered as another stakeholder.

Good communication is the core of building mutual trust by making both science and scientists user friendly. Identification of potential problems and early management of these is essential and scientists have a major responsibility and key role in the communication process.

The issue of public relations was also raised during the audience discussion of this seminar but it was suggested that public relations tend to be a one-way dialogue whereas science communication is a process where both the communicator and the audience can learn something. It was also suggested that

public relations agencies can sometimes be more 'economical' with the truth which could prove very dangerous if this was applied to the communication of science.

A member of the audience asked how the varied specialities of the members on the research team helped to interpret the research findings. Dr Burningham explained that each member of the team contributed their skills in different ways, such as having a member of the team from the chemical industry to be able to approach at the survey questions from an industry perspective.