

BA and ESRC Science in Society seminars 2005

How do we communicate uncertainty and risk?

The first seminar in the ESRC Science in Society series looked at the communication of uncertainty and risk. Professor Nick Pidgeon from the Centre for Environmental Risk is head of a research project funded by the programme set up to investigate how the public view certain institutions and issues with regards to communicating risk and uncertainty. The institutions looked at included the government and non-governmental organisations (NGOs), and the issues ranged from genetically modified food to the management of radioactive waste.

The issue of communicating risk and uncertainty were approached from a social science perspective and it was found that it is more than just a matter of how the public perceive possible risk. It is the consequences of the individual issues, and their possible severity, which most concerns the public. An example of this is nuclear power as past experience shows that in a good year, the risk to individuals is fairly low, but if you take into account the risk in a bad year, then the results could be catastrophic.

An important aspect of communicating risk and uncertainty is to acknowledge that there is no single 'public', rather that different sectors of society need to be informed and involved in different ways. Professor Pidgeon also stressed that new approaches need to be found which actually address people's concerns

rather than just presenting them with statistics and probabilities which may lead to more confusion.

It is important when communicating risk to take into account the effect that the media and other groups, such as interest groups, can have as these can often change public opinion over a very short period of time. An example of this was the MMR controversy.

Trust is a very important factor when attempting to communicate uncertainty and risk. It can generally be seen that there are high correlations between trust, risk perception and acceptability. A major conclusion from the research project was that issues of communicating risk are really about trust and governance. It is often the case that if people trust managers, the government or another responsible body, then they will tend to see lower risks and they will see these risks as being more acceptable.

Although a survey carried out for the project showed that people's trust in certain institutions, such as the government, is lower than that of others, such as doctors and watchdog organisations, a subsequent survey showed that although people may not trust certain institutions, they still realise the importance of including them in the decision-making process regarding these issues.

A further outcome of the research was that effective risk communication does not just depend on whether the public trust or do not trust an individual or body. Mistrust could actually be interpreted as a healthy combination of scepticism and reliance. People are often sceptical of the government but they rely on government to make decisions for them.

Professor Pidgeon suggested that there may be too much emphasis placed on the issue of trust, and that in some circumstances it may be more important to focus on what is driving the concerns about an issue in the first place.

For practitioners who are involved with communicating risk and uncertainty, there are many different types of risk taken into account. These include the risk to the client (the company or organisation); the risk perceived by the company's stakeholders; and other external risks, such as the media.

Pippa Hyam and Amy Sanders run a company called Dialogue by Design which acts as a consultancy to organisations which need to communicate risk to the public. They stressed that when designing a risk communication programme, other factors besides risk are also taken into account.

Dialogue by Design worked with The Committee on Radioactive Waste Management (CoRWM) to develop a programme to look at the options for managing the UK's radioactive waste and to come up with a long-term solution which will protect people and the environment. CoRWM was asked by the government to find a decision which is not only scientifically credible but which will also invite public confidence so that it can be implemented.

CoRWM has come up with three options for dealing with radioactive waste and is using the discussions designed by Dialogue by Design to help them find out what the public thinks about the different options.

A very important part of this programme is how CoRWM communicates the risks of radioactive waste management to the general public, in order to promote understanding and support. CoRWM has employed various ways of engaging with the public and their stakeholders, such as expert workshops, citizens panels and stakeholder meetings.

Dialogue by Design were involved to help CoRWM develop a programme to communicate with the public to raise awareness of CoRWM's work, to enable participants of the programme to question the implementation of the options presented and to feed back the information gathered to CoRWM.

CoRWM looked at public issues of radioactive waste which showed that it is a technically complex issue, which includes both radioactivity as a concept and also the options available for managing the waste.

A poll carried out by Mori showed that the feeling towards radioactive waste is predominantly negative (89%). Radioactive waste is perceived as risky and this outweighs any benefits it may offer.

The public were also found to have low trust in politicians and the energy industry generally and more trust in organisations such as environmental and campaign groups. There was also a strong ethical, moral and social dimension to the public's attitude towards radioactive waste.

The approach taken by Dialogue by Design to help CoRWM to communicate with the public was to undertake discussions, to help people consider the views of others, to try and find a group consensus and understand the dilemmas which face decision-makers in companies like CoRWM.

It is important to give the public enough information so that they feel able to participate in a discussion but they need also to be aware that companies such as CoRWM are not expecting them to display any technical expertise or to make the decision for them.

The discussion is more to find out what people think about various issues and what would and would not be publicly acceptable regarding the management of radioactive waste.

There were several questions which the discussion asked the members of the public taking part: which criteria are the most and least important? Should the problem be dealt with immediately or should we wait until methods are found which are more certain to work? Should the sites for managing radioactive waste be near to nuclear sites or not, and how many should there be? What would make having a facility in your area acceptable or unacceptable? Does the group have a general preference for one of the three options described?

A further issue of risk communication was raised during the audience discussion. Professor Pidgeon mentioned that people often assume that if a substance or material is allowed into the workplace, then it must be safe to use. However this is not always the case. An example of this is the dry-cleaning industry where staff realised that the chemicals used in dry cleaning can be harmful to breathe in but not that they were also harmful to touch.

The question of the role of public relations was also raised by a member of the audience, namely should effective risk communication be a matter of good two-way dialogue. But Professor Pidgeon pointed out that a two-way dialogue is not always desirable, often it is just a clear message that needs to be communicated.

In some cases, as Pippa Hyam said, a dialogue with the public can be a more effective way of communicating as people understand things better if they can take ownership of them rather than being taught something.