

Don't patronise the public

People will listen if science is presented in the right way, say **John Pollock** and **David Steven**

WHEN Prime Minister Tony Blair calls for British institutions to modernise, media Kremlinologists these days hear a coded reference to the Royal family. Yet as we all know, the landscape is littered with organisations that have failed to move with the times. Science communication is an example. As Robert May, the government chief scientist, admitted at the recent British Association's Annual Festival of Science (why not just SCIfest 97?) in Leeds, the publications of Whitehall and the institutions it supports often sell the public short, underestimating people's appreciation of "the nature of life".

Science is undergoing a transformation and the old order is being forced to change. The new order – usually younger and more attuned to current culture – champs at the bit. Our research into science communication, and reactions at SCIfest 97, suggest that if scientists are to be front-line participants in a radically changing Britain, then we must change every level of the communication process.

Twelve years ago, a Royal Society committee chaired by Walter Bodmer urged scientists to "learn to communicate with the public, be willing to do so, indeed consider it your duty to do so". The Public Understanding of Science movement – and an absurd acronym, PUS – was born. It's characterised by smallish grants, some big ideas and a generally amateur approach aimed at easy targets. One visitor to SCIfest 97 called it "yoghurt pot science for kids in leafy suburbs".

But 80 per cent of Britain is urban. Little science communication reaches the inner cities or young adults. Nowadays, people snack on information. Long reports, studded with contributions from the great and good, stand no chance. We need high-impact communications. Whether it's via posters at bus stops, videos in health centres or fridge magnets in supermarkets, we must address issues that concern people.

Bodmer describes the way in which the news of a link between BSE and CJD was presented to the public as a "huge mistake", but blames the government. If a scientist had explained the risks involved, he said, things would have been different. We disagree. Our findings suggest that, at a time of great social and cultural shifts, the public mood has changed. Roger Highfield, *The Daily Telegraph's* science editor, argues that "we know the public are more mistrustful of scientists as a result of [the BSE] saga." Helen Wallace, Greenpeace's senior scientist, goes further: "Politicians have lost credibility, and if scientists don't change, they will lose credibility as well."

Another problem is that some scientists (and science organisations) assume people are stupid. They ladle out facts and tell the public how irrational their fears are. Brian Wynne, at the Centre for the Study of Environmental Change, compares this to "the Englishman abroad who can't be understood in a shop – and simply shouts louder". As Peter Cochrane, BT's head of research noted, people aren't dumb – just (currently) uninterested.

She wants "to educate scientists to be 'ethical engineers'...taking on board citizens' rights and interests".

A fresh attitude is needed. The desire to communicate should be apparent in the communication, not the committee room. Otherwise the public, especially younger people, will switch off. And switching people back on is much harder than keeping them interested.



Changing what one expert called the "them and us communication dynamic" isn't easy. Many science organisations have "an almost religious attachment to the amateur". To survive in the crowded information marketplace, however, professionalism is needed. But developing successful science communication means raising the status of communication, and this costs money.

Success also requires trust. People intuitively pick up on what Wynne calls "institutional body language". They can tell when an organisation isn't genuinely open and accessible. Glossy brochures then become little better than vanity publishing. Trust – building also costs pride. It helps to admit mistakes, to listen and learn.

Part of the new cultural agenda is a more inclusive approach to the public. IBM is developing programmes widening access to new technologies. Samantha Helliwell, IBM's community programmes manager, explains: "We desperately need projects which start with where disadvantaged communities are at the moment."

Many science communicators now talk about two-way dialogue with the public. How far this process goes remains to be seen. Elizabeth France, the Data Protection Registrar, is among the most ambitious.

John Pollock and **David Steven** are authors of *now for the science bit – concentrate!*, available free at <http://www.riverpath.com>, where you can join ScienceTalk, a discussion forum on science communication.



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