

Science and Society: Realising the Vision

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We have a vision. A vision for a better relationship between science and society in this country. A vision for a society that is excited by science, values its importance to our social and economic well-being, feels confident in its use, and supports a representative, well-qualified scientific workforce.

Throughout our first year, I and other DIUS Ministers have been exploring this vision with many different groups and individuals.

Science improves the quality of daily life, underpins prosperity and increases our readiness to face the challenges of the future – both in the UK and overseas. There has never been a time when the UK population has been bigger consumers of the products and benefits of science and technology, or that the future economic success of the UK has been more dependent on successful exploitation of science and technology and our ability to become an Innovation Nation.

There is great potential for science to contribute to good policy-making and sound government. Science can help us to address the main challenges we face as a nation and as a planet: adapting to climate change; global security and international terrorism; rising populations and the consequent pressure on food, water and other natural resources; the impact of human diseases such as pandemic influenza and animal diseases such as foot and mouth and blue tongue.

The need for consultation

I believe there is a strong leadership role to be played by Government, in addressing these challenges. But to ensure we all make the right decisions, now and in the future, we want to develop a shared strategy that is not only the responsibility of Government, but all groups which impact on the relationship between science and society. We have therefore just published a consultation document to help us develop that strategy.

This consultation aims to build on past policy and success but also recognises that the changing pace of scientific discovery and the changing environment in which science is viewed by society raises new challenges and questions for us all. It focuses in particular on what more we need to do in public engagement; improving public confidence in science and developing a workforce to achieve this common vision.

Our ambition is to build a more mature relationship between the public (including the media and education), policy makers and the science community (including business) so that each understands the others' objectives, ways of achieving them, aspirations and concerns.

The Challenges

Each chapter of our consultation sets out a goal, describes the current situation, and then poses a number of questions that relate to the key challenges in the vision. The first goal is to achieve a society that is excited about science and values its importance to our social and economic wellbeing.

We believe increasing excitement in science, improving inclusion and strengthening the relevance of science in our culture will be best achieved by professionalising public engagement and identifying ways to recognise the benefits it brings. The consultation identifies key areas for action as strengthening communication, especially two-way, improving access and participation, and doing more to demonstrate relevance.

The second chapter focuses on helping to create a society that is confident in the use of science.

In March, the DIUS/RCUK Public Attitudes to Science Survey 2008 was published. It showed that public trust in scientists continues to be strongly influenced by the scientists' experience, academic credentials and,



crucially, their perceived independence from government and big business. It also indicated a demand for more consultation on scientific issues before decisions are made. The consultation therefore identifies four key areas for action to help create a better understanding of the nature of science, to build confidence in science funded by the private sector, to do more listening to what people say and to develop a better understanding of the role of science in policy making.

The final part of the vision sets out our goal for a society that supports a representative well-qualified scientific workforce.

For the UK to remain at the forefront of scientific discovery and to secure the UK's future in a highly competitive global economy, we need to ensure the next generation of scientists and engineers are properly equipped through opportunities in education, research, commerce and government. Unlocking the talent of Britain's citizens through increasing their ability to acquire and develop their own skills is critical both individually and at a societal level. As the Leitch Review of Skills outlined in 2006, the only way to compete on the world stage is to increase the coverage of higher levels of skills in our workforce. Through the consultation, we want to explore three areas for action, linking how to excite people about science to developing skills for life, increasing clarity in the benefits of scientific skills in all careers and increasing the diversity of the workforce.

Call to Action

Over the next few months we aim to

engage with all sectors of society, the science community and policy-makers to address the questions in the consultation document.

We are trialling a number of new ways

to run this consultation in order to reach as many people as possible. The consultation has a strong on-line focus as a gateway to other ways to take part. <http://interactive.dius.gov.uk/scienceandsociety>

I believe that Science in Parliament's audience has a key role to play in the success of this strategy and I encourage you to participate in the consultation and development of the final strategy and implementation plan.

OPINION

Science in Parliament

*The Rt Hon Lord Jenkin of Roding
President of the Parliamentary and Scientific Committee*

It has always surprised people when I have to admit that I did almost no science at school. We had evening biology lectures by a brilliant retired teacher who put marvellous pictures on the screen with an epidiascope – but this was extracurricular and happily did not involve examinations. That was where I first learned about sperm whales, penguins, chimpanzees and even the duck-billed platypus. I am not aware of having learned any physics or chemistry at school. I did Latin and Greek, ancient history, French, and some maths (indeed I have on my bookshelves a maths prize). At university, it was the same – classics and law. – but no science.

This came sharply home to me when, after a brief and undistinguished career at the Bar, I got a job in the chemical industry. On my first day, I was asked if I knew what was meant by 'organic chemistry' – and had to confess that I did not. So I was given a school textbook to read on organic chemistry – my first encounter with the world of molecules and atoms, chemical compounds and suchlike. At the end of my first week in the office which I shared with a chemistry PhD who looked after process licensing for the company, I wondered aloud how I could ever be of any use to my employers! Yet, I stayed with them for 13 years, so perhaps I must have been.

However, when I expressed an interest in standing for Parliament – Oh dear! I was almost sacked on the spot! It was only when they began to complain that no-one in the House of Commons seemed to understand industry, and I replied that if they named a company I could tell them an MP it had sacked, that they began to get the message!

There may not be a lot of MPs today who have had as little scientific education as I had 70 years ago, but, equally, there are not a lot of trained scientists or engineers who find their way into Parliament. It is my impression that, with some notable exceptions, we are still a pretty unscientific lot!

Before I was elected in 1964, I had heard about the Parliamentary and Scientific Committee, and had been advised by a friend to join – it was my first All-Party Group – indeed, I learned later that it was the first All-Party Group. I have never regretted this decision. It has always seemed to me to be a valuable bridge between the worlds of science and technology and the world of politics. Over the years, the benefit of hearing, month after month, eminent scientists, engineers and academics discussing the issues of the day as they affected their businesses, professions and research has been incalculable. Often, the topics chosen have directly borne on controversies relevant to legislation coming before Parliament – I need only instance the recent legislation on human fertilisation and embryology to make this point. Under successive Chairmen, and with the help of successive experts to advise them, the P & Sci has attracted speakers and audiences of real distinction whose wisdom has had a real influence on our debates, both in the Commons and in the Lords. Conversely, the influence can go the other way – as for instance on the issue of the public engagement in science, or on other subjects investigated by our S & T Select Committees.

When I say 'audiences', it is necessary



to point out that these days most of those attending our meetings are not Parliamentarians but represent outside organisations. These men and women are certainly very welcome and add much of value to our discussions; but I am not alone in regretting that we do not attract more MPs and Peers to come to the meetings. With science impinging on so many of the concerns that we have to deal with, week in week out, I think that more of my Parliamentary colleagues, *of all Parties*, would find the hour-and-a-half spent once a month time very well spent in helping them to find solutions to those concerns. Climate change, energy conservation, food standards, industrial innovation, as well as the teaching of science in our schools, research in our universities, and the ever-accelerating pace of scientific discovery, are all issues that regularly come up at Question Time or in Select Committee Inquiries. They are also all issues that have regularly featured in the programme of the P & Sci.

Newspaper articles, TV and radio programmes, the internet and even specialist All-Party Groups are of course useful sources of information and advice on which we all rely to make ourselves better informed. But