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Science and Society Consultation Launch
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CHECK AGAINST DELIVERY

Good morning. It's great to see so many of you here at Thinktank.

Let me first thank Nick and his colleagues for hosting today's launch. This dynamic facility provides the ideal setting to begin the process of conceiving a new approach to public engagement on science in its broadest sense.

Engagement is no longer a niche issue among educationalists, but one that's vital for the country – for our ability to compete in the global marketplace, for the health of our democracy, for the way we choose to face the future.

My purpose today is twofold: to explain the significance of the science and society agenda, and to highlight the importance of this consultation in taking that agenda to another level.

The vision

Over the coming months, we need to hear from school children and parents, science teachers and researchers, business leaders and media experts about how we move towards a society that is excited about science, values its importance, feels confident in its use, and supports a representative and qualified scientific workforce.

This is the language I've been using over recent months to capture what we're trying to achieve. It's about more than general scientific literacy.

The potential for science to shape our common destiny in positive ways has never been greater. It's essential that we secure a sustained commitment from professors and policy makers, journalists and company executives to demonstrate the contribution of science openly and compellingly.

People in this audience know how science improves our quality of life, how it can produce solutions to challenges like climate change, global security and disease. But these are things that everyone should know.

More than that, I want to see a society that understands scientific method – double-blind testing, peer review, the evaluation of risk – and is therefore better equipped to make sensible choices in this age of information overload. A society that can be awe-struck by science, but never dumb-struck.

Progress

It's been just over a year since Gordon Brown created the Department for Innovation, Universities and Skills – a reorientation of government and policy that has improved support for and coordination of UK science.

DIUS has secured record investment in our research base. By 2010/11, the science budget will have tripled in little over a decade, helping to maintain the UK's lead over the rest of the G8 on productivity and efficiency measures. We have allocated funds for the research councils to work collaboratively on some of the fundamental dilemmas we face both domestically and internationally, like renewable energy and increasing longevity. We continue to support the core disciplines – including, for example, a £511 million stake in the Large Hadron Collider at CERN.

And we're making every effort to ensure that our knowledge economy has the highly-skilled scientists, engineers and technicians necessary to ensure that Britain is a world-leader for innovative products and services.

As science minister, I've been encouraged by the public's enthusiasm for science and the quality of educational programmes.

This year's Science and Engineering Week was the best yet, attracting some 1.4 million participants to around 3,500 events nationwide.

Through Beacons for Public Engagement, university scientists are stimulating debate around stem cell research, nanotechnology and environmental sustainability – and inspiring future generations of researchers.

In our schools, the teaching of science is steadily improving – as I've seen in this region through visits to Warwick School and Kingswinford in Dudley.

The Public Attitudes to Science Survey 2008 supports this positive picture. 82 per cent of people said they were amazed by the achievements of science, up from 75 per cent in 2000. Nearly 80 per cent believe that people should take an interest in science, given its impact on their lives.

At the same time, however, only 21 per cent agreed that the public is sufficiently involved in decisions about science and technology, while 78 per cent agreed that the public "ought to hear about potential new areas of science and technology before they happen, not afterwards."

Science communications

Which brings me to the consultation document itself, where the vision I described earlier – of excitement and confidence about science, of support for a high-calibre workforce – is broken down into three parts.

The first part asks how we can strengthen communications, increase participation and convey the relevance of science. Initiatives like Beacons and the new Sciencewise Expert Resource Centre are important here, but the challenge goes far wider.

Genuine dialogue on science is an increasing feature of public debate, thanks to museums like this and the efforts of policy makers and scientists to harness communications tools like blogs, Second Life, and e-voting.

Yet we need to consider how such work is properly recognised and rewarded – whether by college lecturers or by industry volunteers serving as Science and Engineering Ambassadors. We should think about what more can be

done to improve science coverage in the media beyond the output of experienced reporters. And we must work together on reaching audiences currently under-represented in the professional science community itself – particularly among black and minority ethnic groups, and women across the board.

Confidence in science

The second theme of the consultation – a society confident in using science – comes back to the point I made about understanding the mechanics of scientific inquiry. Here, the focus is on building public trust in academia, business and Government itself as we apply scientific insight.

We all have a job to do in demonstrating that the rules and ethical underpinnings of scientific research apply regardless of commercial or political imperatives. Put another way, our aim should be for the public to regard the allegiances of scientists as immaterial to the professionalism they bring to their work – whether that's for a private firm, in a university or for another state-funded institution.

I therefore urge everyone – especially businesses that have more contact with the public – to be transparent about their activities and the science behind them. Trust in science will increase, I believe, through companies explaining the motives behind their research, discussing its potential social impact, and by embracing the ethical code for scientists.

I'm also looking for ideas on how we improve interaction between academics and policy makers, how we can listen more effectively to public opinion on major issues like biometric data and reproductive technologies – and use these debates as opportunities for mass education.

The scientific workforce

The third aspect of the document concerns how Britain should nurture the diverse scientific community it needs for the future.

Clearly, we're moving in the right direction on this front. Overall attainment in GCSE, A level, first degree and postgraduate results are on an upward curve, thanks to more science graduates teaching science than ever before. From September this year, all pupils with an aptitude for science will be able to study triple science at GCSE, giving them every option to pursue careers that require a solid grounding in STEM subjects.

STEMNET, sponsored by DIUS, has been an excellent resource for teachers and pupils in the classroom and far beyond. Science and Engineering Clubs are raising the aspirations of young people. SEMTA, the Sector Skills Council for science, engineering and manufacturing, has been instrumental in designing the new 14-19 Diploma in Engineering available in the coming academic year.

But we cannot be complacent. Other countries are making deliberate attempts to train more home-grown scientists. We want the scientific breakthroughs of the 21st century to be associated with Britain.

There's no shortage of resources to support STEM teachers – quite the opposite. But we need to explore how we might make the curriculum more relevant to younger people, coordinate the enrichment activities offered by business more effectively, and tackle the under-representation of certain groups – from the classroom to the boardroom.

Relationships

Achieving success in these three related spheres requires a stronger relationship between the public, policy makers, the media and scientists – where everyone understands each other better. It's a question of greater engagement and collaboration, rather than more activity or bureaucracy.

It's up to DIUS, for instance, to assume a strong leadership role, working with partners across government and beyond to achieve the vision I've outlined.

Equally, it's for business to respond to the public's appetite for information that comes direct from scientists themselves, to explain what science-based careers are available in their industries, and to consider how to increase the diversity of their staff in these roles.

Taking part

In terms of the consultation, the next few months are really important. It's the chance for us to hear new ideas, learn about what works and involve more stakeholders than ever before in designing the final strategy.

And in the spirit of new media I mentioned before, I commend to you the consultation website – on display outside – as the best means of sharing your views.

The site allows anyone to attach comments to the online version of the document, or post some of the consultation questions on their own website. It invites users to create links to events and discussion threads that they're hosting elsewhere.

So, through one or more of these channels, let us know your experiences. Tell us if further questions need raising and addressing.

One final thought: "science and society" has become a familiar phrase. But given that our abiding purpose in producing this strategy is to ensure a better-informed, forward-looking and prosperous Britain, perhaps we should switch those nouns around: "society and science". For this is all about achieving a stronger society built on the best that science has to offer.

Thank you.