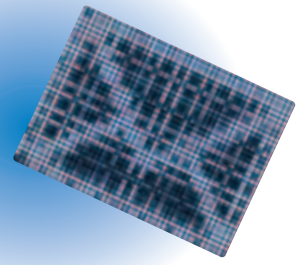


The media need the message



Science and technology just might be entering a new golden era in the UK. No longer are budgets in decline for academic research. The Prime Minister and the Chancellor of the Exchequer vie with each other to promote the case for turning research into technology. Some heads of university engineering departments even tell me that undergraduate recruitment is increasing. This could, then, be just the right time for engineers to go public, to communicate the importance and excitement of turning scientific knowledge into something useful for society.

In recent years, a growing cadre of scientists has become, if not media superstars, regular contributors to print and broadcast media. This visibility owes much to the effort that the Royal Society has put into Public Engagement in Science and Technology (PEST) since it set up the Committee on the Public Understanding of Science (COPUS) in the mid-1980s. Sadly, with a few honourable exceptions, engineers, as opposed to inventors who are very different creatures, have yet to make the same impact.

It may be a long, hard struggle. The Royal Society started its 'campaign' 20 years ago. But by constantly putting engineering, and engineers, before the media, the profession could

begin to wear down even the most technology-averse writers and their editors, the arbiters of what appears in their pages and programmes.

Study the media

There are many ways in which engineers can become more media-aware. To begin with they can find out about how the media operate, the need to finalise a story in hours rather than days, the impossibility of mentioning all 50 members of a team, and the system that takes much of the process out of the hands of the writers, which is why writers are often as upset as readers when a headline makes no sense. Fortunately, there is no need to invent ways to make engineers more media-savvy. They can simply get involved in such activities as The Media Fellowship Scheme launched in the mid-1980s by the British Association for the Advancement of Science as a part of its contribution to the work of COPUS.

Each year this scheme places about a dozen scientists in the media for between six and eight weeks. By working with newspapers, magazines and broadcasters, the researchers can experience the battle for media space from the trenches. They can then return to their careers in a much better position to bring engineering to the media.

Press releases

Engineers can also do something to increase the flow of ideas to the media. For example, they can challenge their companies and ask why so few press releases extol the virtues of the latest technological advances.

Science, especially the life sciences, now appreciates the value of the well-aimed press release. Engineers don't seem to bother, perhaps because companies are more interested in garnering coverage for their business acumen. Tomorrow's share price may be important, but technology will determine next year's price. There are some honourable exceptions; the head of communications at Rolls-Royce has a special responsibility for conveying news about technology to the world.

It is possible to tell the world about both your commercial acumen and your engineering prowess. Foreign companies do it all the time. Visit web sites run by American, Asian and German businesses, for example, and you will find press releases, papers and even technical magazines that set out to persuade the world that these companies are shaping the future of technology.

Research in engineering may not churn out quite as many research papers as the life sciences – some of which are, in any case, little more than 'stamp collecting' – but the flow of literature, papers published in journals and delivered at conferences, is far larger than media coverage suggests. If the scientific and medical journals can sustain a steady stream of press

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releases, why can't the journals from the engineering institutions?

The journals, and their contributors, need to look at this promotional activity not just in terms of the subscriptions, submissions and points in the research assessment exercise that coverage can deliver, but also for what it does to promote engineering and technology.

Articles

And why don't engineers write articles for general readers? Engineers admit that their profession is full of people whose writing skills are restricted to dense technical reports rather than finely honed articles for general audiences, but I refuse to believe there aren't plenty of literate engineers who can put together a convincing and fascinating account of their own work.

Perhaps engineering is happy to leave it to the scientists to communicate with the media. That is a mistake. Science and engineering have different messages to get across. Science has to sustain public support for government spending, a case that it has made with increasing success in recent years; engineers have to persuade companies to spend money, which is arguably a lot more difficult.

What's in a name?

When engineers do go public, as often as not it is to complain about the issue of the 'engineering' label. No, we are not mechanics in greasy overalls, they harrumph. Not that long ago, a serious and influential report wasted space urging the profession to put some effort into persuading the media 'to use the

words engineer and engineering wherever appropriate'. This isn't just pointless, it fails to understand how the media operate, treating it as some collective entity that is open to persuasion.

Does it matter what newspapers *call* engineering as long as they *deal* with the subject? Does it really matter if the term *engineer* goes the way of *alchemist* and something new takes over?

How to work with the media

- Find out how the media work through such mechanisms as the Media Fellows scheme operated by the British Association for the Advancement of Science (BAAS).
- Get some training on how to work with the media. Sign up for the courses organised by the Royal Society and the appropriate research councils.
- Make yourself available to the media by signing up for the database of experts maintained by Science Media Centre.
- Tell the media what you do by putting out a sustained flow of news releases about your R&D.
- Show the world what you do by inviting the media to visit your laboratories and production lines.
- Get to know the media by attending events where they turn up, such as the annual science festivals.
- Do not confuse new with news – milk every idea for all it is worth by using every twist and turn of an idea as an excuse for yet another announcement to the media.

Conclusion

It took science a decade or so to make an impact, and to reach a position where the subject of science is now commonplace in the media. Engineering and technology can shorten the learning curve by building on what scientists have already done.

When the Royal Society's 'campaign' first got underway, it talked of public *understanding* of science. Science communicators now use words like *awareness* and *engagement* and other terms that do not imply that if only people knew more science they would love and accept everything that scientists did in their name, and with their taxes. Now the science communication community accepts that more understanding could actually make people more sceptical and questioning. There is also a growing realisation that scientists need to better understand the public.

The concept of science communication has moved on a lot in the past 15 years, with a growing body of research data and some thoughtful studies on the issue. Engineering starts some way behind the rest of science, but it can exploit this experience and hit the ground running. It must, though, accept that it has much to learn.

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for 20 years and edited the magazine in the 1980s. He was one of the first members of COPUS and now also advises organisations on how to work with the media.

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