

Motivate students for science communication

Communicating science through media has its roots in what is called science popularization. When the Britishers came to India, along with science this age-old tradition of science popularization was also brought to the soil. Eminent Indian scientists like Mahendralal Sircar, J. C. Bose, P. C. Ray, Ruche Ram Sharma and others carried this tradition forward. After India became independent in 1947, Meghnad Saha, S. N. Bose, C. V. Raman, D. S. Kothari and others carried forth the torch of science popularization.

In recent years, many eminent scientists have been popularizing science through lectures, books, newspapers and TV shows. A group of science writers and journalists have also emerged on the scene who present science in various media. The Department of Science and Technology has set up the National Council for Scientific and Technological Communication.

Despite all these efforts, communicating science to the public is still a much neglected field. According to a study done some years ago, hardly one to three per cent of newspaper space and television time is allotted to science. It is no surprise therefore that science communication, at present, lacks the necessary infrastructure and manpower despite the fact that the country has a huge scientific base.

A detailed study as to why very little science enters various media of our country and what hinders its entry and growth, has been carried out by me under a K. K. Birla Foundation Fellowship.

Much blame for the present malaise in science communication can be laid on the faulty science education in the country. Communication skills are given the least priority among science students from high school onwards. It is drummed into science students that language is not important but the scientific message. The result is that science students are poor communicators and rarely desire to try their hands at communication. They are at a loss even to communicate for their personal advancement! Major changes are required in the present science education to rectify this fault. Apart from the inclusion of science communication as an important subject, especially at the college level, there is need to bring in attitudinal

changes towards communication in the scientific community. Science students, science teachers and scientists should be encouraged to communicate with each other and the outside world.

Blame is often laid on the media persons for their indifference to science. Media persons are often from humanities and over the years they have developed an aversion to, or fear for, science. Judging by their own experience they believe that the Indian public is also not interested in science.

It is true that scientists are also engrossed in their research work that they do not want to be 'disturbed'. They want to remain in their proverbial 'Ivory Tower'!

Then in Government labs several 'service rules' prohibit scientists from speaking to media persons. Either the Director of a lab or its administrative head is supposed to speak to media persons about the research done by scientists in the lab. Essentially, these rules are meant to avoid any embarrassment for the lab or the concerned authority.

Another reason why a scientist, especially the chief of a lab, does not open the doors of his lab to media persons is the fear of exposure, an open invitation for public queries and criticism, as well as the fear of being misrepresented or misreported. There is also the traditional notion in the scientific community that talking to media amounts to seeking cheap publicity in the name of science. Why stir-up a hornet's nest?

However, in the present times, to generate revenue for their survival, scientists have to report about their latest researches in the media to attract the attention of the masses, particularly the buyers of technologies. At the same time, the media has to pay attention to the coverage of science, especially technology, because it is making inroads silently – and sometimes insidiously – into all walks of our lives and the public is aware of it. My small study of the public shows that about 65 per cent is interested in science, a big population!

What should be done to increase the quantum of science in various Indian media? My personal view is: we should have more quality manpower in science communication, in addition to infra-

structural requirements. For instance, there is a strong need to set up 'Science Media Centres' (for details see Dilip M. Salwi, *Curr. Sci.*, 1997, 73, 721–722) in different parts of the country. These media centres can act as interfaces between media persons, science communicators and scientists. With all the modern communication facilities available and with a handful of committed science communicators, these media centres can act as catalysts to increase the quantum of science in various media. There is also a need for setting up a 'Fund for Science Popularization' which can be from various scientific institutes, organizations and industries, to sponsor popular science programmes, especially on the television because a majority of the public have easy access to it. Thirdly, there is a need for setting up a central body for every regional language to produce a standard dictionary of scientific terms, science news features of local interest in regional languages, among other things. Of course, a regional science media centre can take up these tasks. Finally, 'Science communication' has to be popularized as a career among the young people. My study shows that 82 per cent of our science communication never wrote or produced anything highlighting science communication as a career. Science communicators must visit schools and colleges and make the young people aware of it as a career avenue as well as motivate them to take it up as a hobby, if not a career. Besides, our scientists, engineers and doctors should also be exposed to science communication so that they become familiar with its importance and skills. According to one study made in Australia, those scientists who were exposed to media skills take to communicating science easily than those who have not been exposed. Science communication is not cheap publicity but a social service.

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