

Comment

JCOM — FIVE YEARS IN THE FUTURE

‘Science-communication’ journals: navigating through uncertainties

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ABSTRACT: Any development issue has mainly two dimensions — ‘interest of few and interest of many’, so is ‘science-communication’ as well, which leads to unwarranted but unavoidable uncertainties. Unless the former learn to sacrifice their ‘illegitimate interests’, the very objective of a development issue will continue to suffer, putting the latter at a risk of sacrificing their ‘legitimate interests’. The role of ‘science-communication’ is vital in today’s world, especially where complex issues of conflicting interests of science, industry, business, politics, and mass media are increasingly coming to the fore, and public and policy makers need to understand the ‘true science’; the role of ‘communicating science-communication’ has much larger value and impact in analyzing, understanding, and shaping the way how ‘public and political understanding of science’ can be improved with new models, methodologies, and practices. Science has a bearing on the way one thinks, behaves and conducts in the society. Thinking scientific is establishing harmony with nature. It could best be promoted by communicating science in a scientific way, which has therefore come up to be an evolved technique to channel ourselves to scientifically evolved societies, because distortions if any here have greater ramifications. A science-communication journal is dedicated to scientific and technological development as the entire science and technology establishment is. The present piece while deliberating on current scenario of science-communication journals vis-à-vis science-communication profession, describes many challenges poised, and looks at the future prospects and possible solutions, based on first hand observations and interactions.

A science-communication journal is a unique platform for scholars, researchers, practitioners, and policy makers in this specialized interdisciplinary area of knowledge and expertise. Undoubtedly, the growth of this field, i.e. science-communication, is immensely important for the society at large in terms of enhanced science literacy and science culture, but unfortunately by and large it lacks proper appreciation by its peers in sciences and communications. Further to that, a science-communication journal is all Greek for many. In the year 2001, when I floated the

idea of publication of a 'science-communication' journal in India, not only 'commoners' but many 'specialists' also started presuming that it was going to be yet another science journal or science magazine that will carry hard core science research papers or science articles, no different from the existing ones!

So the struggle begins from addressing the challenge of '*people's misunderstanding of science-communication*'. To my view, handling the task of '*people's understanding of science*' could be much easier than that of '*people's understanding of science-communication*'. It seems that everyone is free to (mis)understand and (mis)interpret 'science-communication' the way he feels he can take advantage of it. It may be easier for a scientist to equate it by writing a research paper, for a teacher by teaching science in a classroom, for a journalist by reporting election results of a science academy, for a politician by merely uttering a couple of scientific jargons in his speech, or a vegetable vendor by telling about green vegetables to his customers, or a priest by resembling science with omniscience, or for an author by writing a science textbook and so on!

Similarly, library science, information science, extension, public relations, information communication technology (ICT), and telecommunication, etc., can easily enter the premises of science-communication, though they have some overlap and are best as support systems only and should remain at periphery of science-communication. However, by and large they tend to enter the core and push science-communication to periphery. In the process, the creative approach needed for growth of science-communication is defeated; as these peripheral professions and professionals overshadow and overpower the whole concept and purpose of 'science-communication', and ultimately the growth of science-communication as an independent field of study, research and practice loses the ground leaving public aside as the net loser.

Science-communication cannot be treated as a mixture of all these peripheral areas. While saying so, I am not emphasizing on a firm demarcation or a total cutoff from interdisciplinary and multidisciplinary interaction between these areas, but my emphasis is definitely on illicit and illegitimate attempts on doing away the subject with these or other similar clearly defined different disciplines and blocking the way of science-communication to grow as an independent body of knowledge. In several countries it is already happening.

Here the point I am trying to make is the identity crisis of the subject of science-communication itself, then comes the identity crisis of the science-communication professionals, and finally the science-communication journals are at the high risk of identity crisis. And the impact is manifold. Convincing the concerned authorities in a public or private atmosphere for publication of such a journal becomes an uphill task. The funding is abysmally low, if available, with a rider to make the journal self-sufficient, which again poises uncertainties and challenges. Being a highly specialized and narrower field such journals are likely to attract very less number of readers, subscribers, and authors. So all the time, you as an editor or publisher of such a specialized journal are always on your toes.

Yet another challenge a science-communication journal has to face is plagiarism which is a growing tendency amongst many professionals. It may be because of a very limited original work in this field is available and many opportunists tend to take advantage of commercial or career benefits by producing false works out of plagiarism. Recently, there was a case of a book on science communication authored by such a so called author, who claims to have a M.Sc. degree in science communication from famous Imperial College of London, U.K. This is the blatant one by not a well-known person in the series of more blatant instances by many well-known persons too, who are shamelessly involved in institutionally organized plagiarism of contents, ideas, concepts, programmes, and activities, etc., in science communication, without any fear, rather with borrowed or stolen wisdom, claiming as if they are the first creator of such knowledge! The instances of stealing and lifting paragraphs, chapters, papers, concepts, tables and graphics, etc., without due credit to the source have frequently been observed. Even the themes, sub themes and concepts of science-communication conferences or seminars announced in a journal are copied as it is or with minor modifications here and there. It calls for not only installation of efficient software in the editorial wings of the journals but also requires the creative science communication professionals to keep themselves updated.

The underlying tension between the two disciplines — science and communication, mounted over science-communication profession, is an important challenge to be addressed, which has the roots located in historically constructed occupational identities and understanding each other is the best mantra! The nature of the conflict between communicators and scientists is not personal but professional. The scientific community needs a better understanding and culture appreciation of communication. The communicators also need a proper appreciation of the way science is done and scientists work, their limitations and professional milieu of science. There indeed is a point of agreement between scientists and communicators. And that is, the things can and should be better, and both the scientists and the communicators have a way forward to go to improving science-communication.

A science-communication journal is also expected to address the issues emanating to philosophy and values of science that basically call for application of a scientific method and a logical approach in all walks of life. The first Indian Prime Minister Pundit Jawaharlal Nehru gave a guiding principle 'scientific temper' to the world in mid twentieth century and many of us started preaching for it, as it offers a doctrine for reaching an informed, rational and logical decision provided we honestly follow a scientific temper. However, many a times it becomes so difficult, when it comes to practicing a scientific temper especially in trivial and complex situations, which are mainly governed by 'illogical logic', where 'indented interest' takes the front seat leaving no room for 'scientific temper'. Illogical logic comes to picture quite often, when someone illogically tries to prove a logical point as illogical or an illogical point as logical depending upon one's situation. It is common in politics, but becomes more damaging when science and academics start playing 'illogical logic', which is a reflection on the current state of affairs that is ruining the overall concept of science

and scientific temper, which is under threat and challenge. Whether science communication can set it right!

Science-communication journal being a narrower field suffers proper recognition as a profession with very limited careers and avenues available to newcomers to the field as well as further career progression for the experienced. As compared to hard core science and technology as well as mainstream journalism and mass communication, the possibility of research facilities, fellowships, grants, and career opportunities are extremely low in science-communication, though it is considered to be an interdisciplinary area of 'science' and 'communication' but there seems a little or no appreciation on 'science-communication' by the two. A UNESCO-Kaling prize winner for science popularization Prof. Jean Audouze, a French astrophysicist, said in an interview with Indian Journal of Science Communication that he came into science communication profession only after his retirement. Many scientists come to the field only after they excel in hard science and retire from there. Similarly, a communication professional or a mainstream journalist very rarely may like a job in science communication. Only passion, hobby, and personal interest are the motivational factors for an individual to join science-communication, as it has yet to attain a status of a hotcake subject and an attractive profession. Can a science-communication journal improve it!

As I said in the beginning of this piece, since science-communication is vital to the wellbeing of societies and development of a science oriented culture, the future of science-communication journals is paramount, despite a number of intriguing issues and situations, though need to be seriously addressed, can also kindle a range of new areas of research and study in this field. A science-communication journal must act as a light house for researchers, a watchdog for professionals, an advisor for students and youngsters, a critic for policy makers, and a torch bearer for the overall growth of science-communication field.

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