

Motivation for Science Communication

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Abstract: Science communication is a growing area of research and it cannot exist in a vacuum. Even though if a person chooses not to study science yet the products of science permeates thy life. Science communication involves reviewing literature so that comprehensive definitions can be reached and suitable ways to explain it to the all. It involves use of skills and media to produce an outcome. Poorly devised and executed science communications can have far-reaching consequences. Thereby effective science communication is needed to overcome public mistrust and improve scientific literacy in informed democratic societies.

Key Word: Science communication; Communicator; Intellectual property rights.

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I. Introduction

This paper reviews science communication. Communication is about relationship; listening to people's stories patiently, spending time, sometimes weeks with them and offload their fears for the future. So science communication needs to be driven by the community and should be done for the community. Community could mean a village, an industrial group, a school or any group of people with a shared interest in something particular. The participation of the scientist/ science communicator/ teacher educator is as a partner, or as a junior partner, so it's the community that takes the lead. The fundamental requirement of the community is to build relationships with other community groups and be open to respond to opportunities that arise while communicating. Moreover, if there is a good relationship, then various community groups can come and discuss frequently, and can be responded earliest. Better and effective science communication needs better relationships with communities, and basically are community driven to explain the risks, benefits, costs to take a particular decision. Besides, the fraternity of scientists needs to be open to respond openly to those opportunities. The difference between outputs and outcomes should be clear: it is easy to write articles about science communication, that is an output. And an outcome is a lasting result or impact for the people concerned. Further the purpose of communication is not complete until it is put into practice for people for whom it makes an impact. This needs to be a part of the desired outcomes of science communication too.

II. Challenges

The art of science communication is to pitch complex and complicated thoughts and things in a way that is simple, engaging and also faithful to the evidence. Actually one cannot understand something unless it can be explained to grandmother. The above quote of Albert Einstein, should be the motto of all professional communicators as it envisages the depth of work being done by science communicators.

It is a very challenging task to explain a complex subject in a simple way such that it engages a person without scientific temper and training. The nature and depth of science is itself a hurdle to overcome. Professional science communicators deal with scientists, partners and collaborators, sort out intellectual property issues and negotiate with publishing houses. Professional science communicators have to face this challenge every day. They communicate the scientific outputs of several universities, institutions and research organizations to journalists, investors, politicians and general public. The science communication network needs to discuss the profession and how it can improve so that there are fewer disagreements and better disagreements. Practitioners of science communication need to show and enhance their willingness to learn more about their profession and find innovative ways to improve so that there is better decision making in the society.

III. Findings

According to Fischhoff et al[4], the science communicators must perform the following interrelated tasks-

- [1] Identify the science most relevant to the decisions that people face.
- [2] Determine what people already know.
- [3] Design communications to fill the critical gaps.
- [4] Evaluate the adequacy of those communications.

The communications director for an organization communicates the world-class research and innovation, and the value that brings to the economy and society, as well as possible. This role places a great responsibility on the science communicators to get the message of the scientific research and the science used right. The best standard communication practice is required.

In this digital era, communicators also find it difficult to overcome the spread of misinformation associated with the causes and effects of the scientific research and the further uncertainties associated with research which needs to be investigated. Another hurdle is perceived lack of respect for science communicators in society. Well-meaning campaigns to encourage more diversity in science as the wrong things has a direct impact on people's lives. In this modern digital era communication science there are a number of people each with their own level of knowledge, experience, morals and ethics and hence the message communicated by the science communicators needs to be correct and precise.

Successful containment require effective communication of scientific information, while incorporating local insights and considering cultural differences. Thus science communicators must know about the various audience, how to engage with them, and be aware of making assumptions about their prior knowledge so that the message is conveyed clearly. There is a great need for more accreditation, recognition and training. Further, there is also a need for a culture change within scientific organizations to involve communicators higher up the chain of command.

IV. Conclusion

The Einstein quote is actually rather unfair. Rather more attention needs to be payed by the professional science communicators to bring out the clarity in meaning, purpose and work of scientists in the modern ultra diverse society. Further the communication needs to be such that a wide range of people be capable of not just understanding, but of pioneering advances in complex science.

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