

Communicating science: hints on effective online dissemination

Communicating science to the general public can be challenging. Making complex topics accessible for all readers while maintaining scientific accuracy requires placing the science and research in a larger narrative context. To get the message across, science communicators tell a story.

This article provides researchers with useful information on how to effectively communicate science. To help shed light on this, Milica Momčilović, president of The World Federation of Science Journalists and board member of the Balkan Network of Science Journalists, offers valuable insight.

There are so many who benefit from the work of scientists, from peers and potential investors to the general public and the media. Peers will be interested in determining whether there are any opportunities for future collaboration. Potential investors want to know whether the work will provide them with a significant return.

For the general public, the big question is how the science impacts their lives and their societies. This communication could take the form of a formal presentation, or it could be a casual conversation with friends and neighbours. Finally, the media wants to know what makes the research findings important, including how it's different from what others have done.

"When scientists can communicate effectively beyond their peers to broader, non-scientist audiences, it builds support for science, promotes understanding of its wider relevance to society, and encourages more informed decision-making at all levels, from government to communities to individuals," continues Momčilović. This way science becomes accessible to audiences that traditionally have been excluded from the process of science. It can help make science more diverse and inclusive.

An elevator pitch with a scientific twist

Although having more scientists who are effective communicators benefits science and society greatly, there are still relatively few training opportunities for science students and professionals to develop these skills. Fortunately, effective communication skills are no longer perceived as soft skills. Increasingly they are becoming part of the core professional skills every science student and professional should have.

Momčilović says: "One of the biggest challenges with science communication is that the scientific process is rarely final. A reader or audience member may ask a question with the hope of getting a 'Yes' or 'No,' but the actual answer is often conditional and requires further investigation. This disconnect can lead to frustration as well as mistrust."

Scientists should always remember that the work they do in the lab or in the field is part of a larger problem, whether it's treating cancer or addressing climate change. As such, bringing their conversation back to the big-picture impact can help an audience understand why their work is important even if they may not understand the steps of your research or the nuances of biology or chemistry.

Momčilović suggests developing an elevator pitch that:

Focusses on the big-picture relevance, not the nuances of your research question and methodology.

Describes the goals of your research, using analogies wherever possible to avoid the use of jargon.

Explains why your research is exciting. Highlights the problem you are trying to solve and ties it back to why your work is relevant.

A Coronavirus pandemic and 'infodemic'

Despite the worrying spread of false claims about Covid-19 and the 'infodemic' challenge, the health crisis shows that at critical times, people increasingly return to scientific evidence and rediscover that expertise matters. "It is essential to provide reliable information from trustworthy sources, making sure that media makers work hand in hand with scientists and policy makers to promote trust in science," concludes Momčilović.

November 2021