

The science of science communication

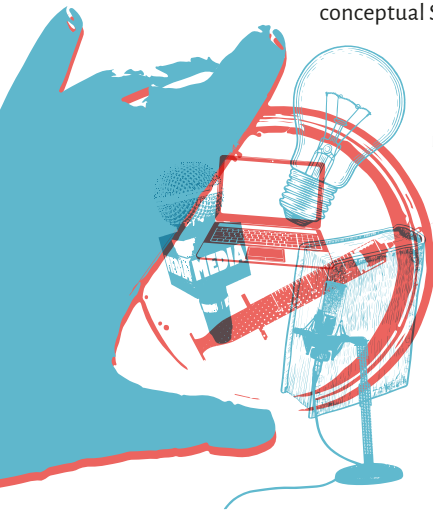
I. BASICS

by RAINER BROMME

The science of science communication (SoSC) has traditionally been seen as a sub-discipline of communication science, studying, for example, the coverage of science content in public media or the selection of science-related topics by newspaper readers. More recently, SoSC topics have been studied by other disciplines, such as psychology, sociology and science education. This development also reflects a broader perspective on the *conditions, processes* and *effects* of science communication.

For example, individual and cultural belief systems are studied as *conditions* for citizens' beliefs in the validity of scientific findings. Conversations on social media about science-related topics such as COVID-19 or climate change are examples of processes of science communication. In this case, the research topic is communication *within* the general public about science, rather than the provision of scientific knowledge by science communicators to the general public. Public trust in science is *studied* as both a condition and an *effect* of science communication. A wide range of research methods are used. Examples include content analysis, experimental laboratory and field studies, and representative surveys. Theoretical and conceptual SoSC studies are also carried out.

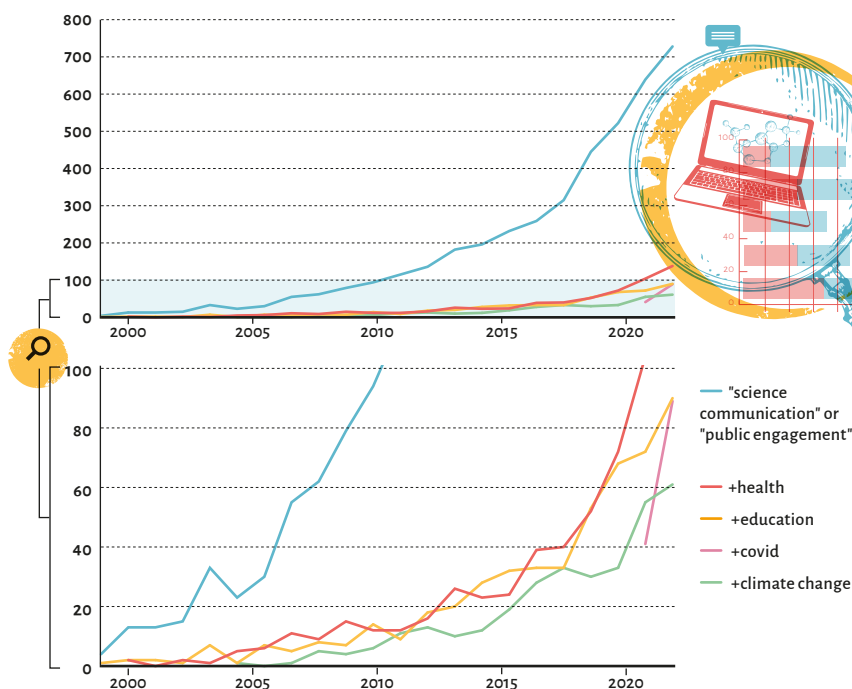
Due to the multidisciplinary nature of SoSC, the corresponding scientific community is defined rather vaguely and not as clearly organised as more established disciplines such as psychology or sociology. Nevertheless, it is growing, as evidenced by the increasing number of scientific publications on SoSC (see illustration).



SoSC has an impact on the quality of science communication. Testing the impact of science communication activities would be an example of practical, applied SoSC. The impact of SoSC on the practice of science communication is not limited to the conscious design and evaluation of communication activities or methods. It is also important to provide food for thought, as well as discourse on science communication and the relationship between science and society. In this respect, even basic (non-applied) SoSC studies are of practical importance. Conceptual/theoretical results, as well as empirical findings on the conditions, processes and effects of science communication, enable *thinking* and *arguing* about science communication to align with the topic in a *science-based way*.

Publication count per year in Web of Science (1999-2022)

Search items mentioned in the abstracts of the publications



Recommended reads:

- ♦ Jamieson et al. (2017), *The Oxford Handbook of the Science of Science Communication*, Oxford University Press. ISBN: 9780190497620 ; <https://doi.org/10.1093/oxfordhb/9780190497620.001.0001>
- ♦ *Public Understanding of Science, Journal*, <https://journals.sagepub.com/home/PUS>
- ♦ *Science Communication, Journal*, <https://journals.sagepub.com/home/scx>