

How to build a science communication strategy and what are the latest trends in the field?

Effective science communication requires careful planning. Using appropriate language, the most suitable tools and channels, and creating engaging content all contribute to greater clarity. Both practice and research have shown that the digitalisation and visualisation of scientific results are becoming essential tools for reaching target audiences effectively.

But how do you start building a science communication strategy? In fact, it is not very different from any other communication strategy. In order to be efficient, you first need to define your target group: is it the general public, peers in your academic field, specialists, or policymakers? Choosing the right tone of voice, using clear and straightforward language, and avoiding jargon are basic requirements. The language and content should be tailored to your audience's level of understanding and interests. The next step is to clarify your communication objectives and choose the most suitable format to convey your message.

As a recent [article](#) in *Information Services & Use* (Sage Journals) highlights, "The need for scientifically informed citizens is critical, particularly in the context of pressing global challenges such as climate change, the spread of misinformation, and the rapid pace of technological change. This underscores the importance of communicating scientific knowledge in a manner that is not only accurate but also engaging and relevant to diverse audiences."

So, what are the most engaging and relevant tools, and what are the latest trends shaping the world of science communication? Just as audiences differ, so do researchers in their communication skills and preferred ways of sharing findings. Not all of them are visual experts capable of creating attractive graphics, yet they can still become excellent ambassadors for their field. Some are at their best explaining their subject during a lab tour or in a podcast, while others might feel more comfortable writing an informative article about their research.

The toolkit and channels available for communication have expanded enormously in recent decades, moving beyond academic journals and edited volumes to a wide range of new formats – so today, even the most introverted researchers can find a suitable way to share their work. Formats can be oral, written, or visual, and channels may include traditional outlets such as journals, radio, and television, as well as online platforms including social media. Researchers may also engage in public events, citizen science

initiatives, or self-publish through blogs and newsletters – each serving a specific purpose.

To make research findings accessible to the general public, the current trends include the publication of educational videos or podcasts on social media platforms, such as [ModuAitor](#), a series by MOME researcher Brigitta Iványi-Bitter exploring the role of AI in design and art or [Szertár](#), a long-running podcast by Hungarian researcher Róbert László Zsiros, which presented engaging content on natural sciences for almost fifteen years. Another popular and inspiring approach is to publish interviews with researchers, such as the [Faces Behind Science](#) or [The 'I' in Science](#) series by the Joint Research Centre of the European Commission.

Storytelling in general is a compelling way of presenting science and can captivate even those with limited prior knowledge – as demonstrated by the success of the TedX and TedEd talks, or the PechaKucha format (20 slides / 20 seconds each), which provides a concise yet comprehensive overview of a topic. Public engagement initiatives such as the [European Citizen Science](#) events allow people to participate in many stages of the research process, from designing research questions to data collection interpretation and publication, or the [Researchers' Night](#), which showcases the work of universities, academic institutions, and research centres through engaging workshops, lab tours, and talks.

Another great way of conveying complex messages is through data visualisation and data physicalisation, as shown by the American duo Data Vandals in their [recent workshop](#) in Budapest. As an article by Impact Media Lab, a collective of science communicators explains, "Our brains are wired to spot patterns and make connections, which is why well-designed infographics can be so powerful. (...) Visuals can evoke emotions and create memorable experiences, making scientific concepts stick in our minds." It is therefore greatly advisable to use visual representation wherever possible in science communication to help to transform complex data into clear, comprehensible formats.

In recent years, the use of social media platforms has also become essential in science communication. Researchers now share content on LinkedIn to reach professional audiences with well-tailored posts, on X (formerly Twitter) to share concise messages with the wider public, or and on TikTok, Instagram, or YouTube to present visually engaging videos. Each platform has its own conventions and best practices, which can easily be learned through online tutorials.

When it comes to communicating scientific findings to policymakers, a 2024 study published in Open Research Europe identified three main trends: "(1) a stronger

engagement between science and policy, (2) more open, reliable, and accountable science communication practices with policymakers, and (3) the increasing digitalisation and visualisation of science communication.” ([New trends in science communication ... | Open Research Europe](#))

This clearly confirms that beyond conducting research, scientists need to develop digital and visual literacy, dedicate time and resources to creating content, and select the most effective way of communicating their findings to wider audiences. Science communication must evolve beyond dense reports and static tables. Engaging visual tools, compelling storytelling, and public engagement offer powerful bridges between scientific complexity and human understanding.