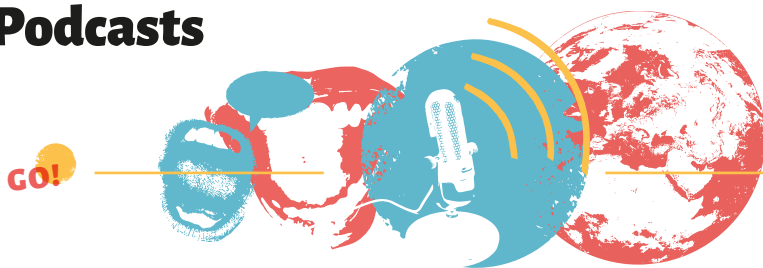


Podcasts



The number of science communication podcasts has grown exponentially since 2010^[35]. Most are aimed at a public audience. The use of video to produce a vodcast has peaked and declined again, which suggests that people listen to podcasts while engaged in other tasks that require them to see what they are doing. The majority of science podcasts are hosted by scientists, with the aim of building trust among the public and getting people interested in science^[36]. The decentralised nature of podcasts allows for the democratisation of information^[37], although it also means that engagement metrics are hard to tabulate. Of the natural sciences, chemistry is the most underrepresented, but podcasting has also proved to be effective for niche subjects and for young people too. Students rate podcasts as a better way to revise than textbooks^[38].

Podcasting is relatively easy to test as a science communication tool, as it is easy to get started and not much equipment, production or editing are required. What's more, you can also reach a global audience and receive instant feedback via social media – it becomes a two-way dialogue, which can build trust. It should be noted that podcasting will put you in the public eye and you therefore have a corresponding responsibility. Posting and replying on social media also takes more time than many people expect, as does preparing a podcast, of course.

Science podcasts come in a variety of styles: monologues, informal chats, professional science news, panel shows and comedy. Indeed, humour is a very effective way to convey scientific information. Most produce weekly, and about half add show notes and hyperlinks.

✓ How to start your own podcast

Start by defining your concept and audience. Research your competition and look for an underserved niche, be it a topic, an age group, a location or a language. Podcasts are often affiliated with an organisation, rather than being totally independent. And around a quarter have external financial support^[35].

Each show needs a general structure and tone. You can establish a relationship with your audience fairly quickly through social media and refer to any interesting comments each week (weekly being the most common “drop” rate).

Podcasts are generally conversational and not overly scripted. Even if your audience is knowledgeable, it's best to explain acronyms, for example, when using them for the first time, as people from outside of your field, language or region might be listening.

The technology required doesn't have to be too complex. You should invest in a good microphone and headphones. Then think about how to soundproof your room like a studio. Some hosts literally record in cupboards or under blankets!

There are many (often free) editing tools. When editing, leave natural gaps in speech and don't remove all “mistakes” or it will sound unnatural.

There are a number of podcast hosts which will get your podcast onto Apple Podcasts, Spotify and Google Podcasts. It's important to launch on one of the main platforms in order to reach a global audience, but also for metrics.

And finally, it's time to publish (aim for the same time each week for a good rhythm). Use social media and websites to promote yourself, your guests and your department.



Recommended reads:

- ♦ MacKenzie L.E. (2019), *Science podcasts: analysis of global production and output from 2004 to 2018*. R. Soc. open sci. 6:180932. <https://doi.org/10.1098/rsos.180932>
- ♦ Quintana D.S. & Heathers J.A.J. (2021), *How Podcasts Can Benefit Scientific Communities*. Cell Press, Trends in Cognitive Science 25(1):3-5. <https://doi.com/10.1016/j.tics.2020.10.003>.
- ♦ Yuan et al. (2022), *Listening" to Science: Science Podcasters' View and Practice in Strategic Science Communication*. Science Communication 44:200-222. <https://doi.org/10.1177/10755470211065068>