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Three tips for giving a great research talk



By [Neil A. Lewis, Jr.](#), [June Gruber](#), [Jay J. Van Bavel](#), [Leah H. Somerville](#) | Apr. 17, 2019, 2:35 PM

Last month, Leah visited Neil's university to give a colloquium talk about her neuroscience research. She spoke about things that Neil, a social behavior researcher, doesn't know much about—brain parts with fancy names such as the “ventrolateral prefrontal cortex.” But he was fully engaged with her talk—and didn't spend any time scrolling through his Twitter feed (promise!)—because she took the time to explain that what she was really trying to figure out was why teenagers learn differently than adults. Leah communicated the topic in a way that could resonate with a broad scientific audience and enrich Neil's understanding of his own work.

Leah did a great job presenting her research—but for every great talk we've seen, there seems to be an equal number of train wrecks. How can you make sure your next talk grips the audience and gets your point across?

Paul **Grice's four maxims** of communication, which describe things that people typically expect in conversations, offer a good starting point. According to Grice—who was an influential philosopher of language in the 20th century—communicators should (1) try to be as informative as possible, giving their audience as much information as needed and no more; (2) be truthful and only share information that is supported by evidence; (3) share information that is relevant for the discussion at hand; and (4) be as clear, brief, and organized as possible, avoiding obscure and ambiguous language.

Tip No. 1: Find a central focus

The first step in building a talk is figuring out your central message; in other words, what should the audience leave with after hearing you speak that they did not know before? There is a **limit** to how many pieces of information people can hold in mind at the same time, so don't package too many ideas together. Asking your audience members to remember too much may leave them feeling lost or confused.

The right focus will vary depending on your audience, so it's important to think carefully about who will be watching your talk. If it's an invited talk, ask the person who invited you: "Who typically comes to these talks? Only department members, or will there be researchers from around the university? Is it mostly faculty and graduate students, or should I expect undergraduate students? Are members of the public invited?" That will help you zero in on the things that will most interest your audience.

Take June's research, for example. She studies positive emotions—such as feelings of joy, wonder, and compassion—and is interested in figuring out whether those emotions go awry if they're experienced too intensely or at the wrong time. Her findings also have real-world clinical implications because they can inform theories about mental illness—depression or bipolar disorder, for instance—as well as interventions that may help individuals manage their emotions. So, if a psychology department invites June to give a talk, she presents her work testing psychological theories. If she's speaking to a group of clinicians or practitioners, she focuses on how her research can be used to help patients in their everyday lives.

Tip No. 2: Get the details right

Once you've settled on a broad theme, the next step is homing in on the precise details that are necessary for your audience to understand your main points. As Grice recommends: Present nothing more and nothing less. Figuring this out—again—boils down to thinking carefully about who you're communicating with, as audiences differ in how much background information they know and what details they're most interested in.

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If your audience is comprised of specialists, they may expect to hear information about the precise details of your study—for instance, *how* you asked your research questions and *what* your analyses say about your findings. But if your audience is the general public or a broader scientific audience, a lot of methodological details may be extraneous—and presenting those details risks boring audience members, leading them to tune you out and turn to their Twitter feeds. In either case, think carefully about what information is needed for an audience to understand—and be interested in—your research, jettisoning anything that’s tangential or that gets too much into the weeds.

All this can take time; it’s much easier to present everything you’ve got instead of teasing apart what’s relevant and what’s not. But it’s time well spent if you want to give a strong, memorable presentation. So, it’s important to give yourself plenty of time when preparing your talk.

Tip No. 3: Present clearly

Grice’s final maxim recommends that speakers present information as clearly as possible. That advice applies to what you say and how you say it—something that takes practice. It’s also something to keep in mind when you’re preparing slides.

Elegant slides, with minimal language and clear visuals, can help to ensure that your main ideas pop out. Avoid cluttered content on your slides because audience members may lose track of what you’re saying if they’re trying to decipher a confusing slide. Make sure that your slides are **easy to read**—no more than three or four main points, avoiding complete sentences—and, whenever possible, include eye-catching visuals. But don’t overwhelm your audience with special effects and dizzying slide transitions. When it comes to slides, less is often more. (June covers these and other topics in a **handout** she developed.)

On slides and in the talk you deliver, pay special attention to avoiding jargon. If you’re only speaking to people directly in your subdiscipline, then it may be OK to use specialized language and acronyms and assume that your audience will follow. But if you want your work to have impact outside your immediate bubble, you’ll need to either explain your jargon or replace jargony terminology with words that everyone can understand. For example, when Neil talks to a broad audience about “cognition” and “affect,” he uses “thoughts” and “feelings” instead—words that convey the same information but are more broadly understandable.

Finally, be honest when presenting your work, acknowledging limitations up front. For instance, if you’re studying a psychological phenomenon by testing U.S. college students, you may be tempted to generalize your findings to apply to “all people” in your conclusions. Don’t do that. In addition, if

Talks continue to be one of the primary ways that scientists share information about their research—whether at conferences, during visits to other research institutions, or even at public lectures. When people take time out of their busy day to listen to us speak, we owe it to them to ensure that they get something out of it.

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doi:10.1126/science.caredit.aax7352

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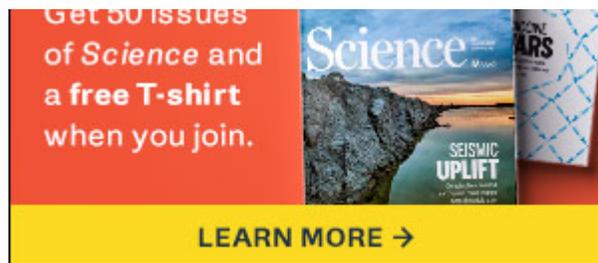


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