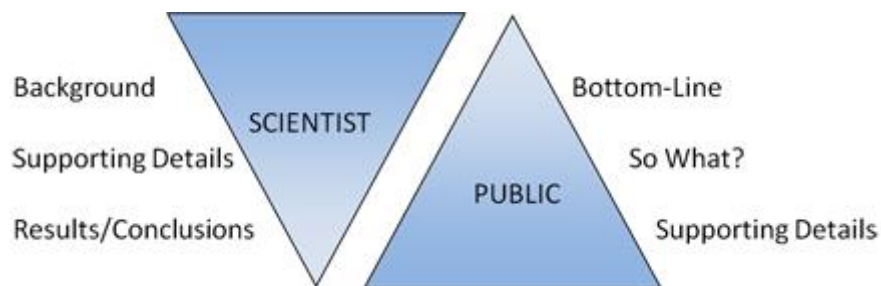


Communicating Science: The Basics

Clear, concise communication is essential to public engagement with science. For others to engage and share with you, they must understand what you are sharing with them. How you communicate depends on whether you are publishing research results in a peer-reviewed journal, talking to a reporter, interacting with students, or discussing your research with the public. The ideas herein can help describe the theory behind the activities used in the Building with Biology events and guide you in conversations about your research.



Scientists and the public have different communication styles. While scientists often start by placing research in a historical context, the public wants to know the point from the beginning.

Define Your Goal

Scientists participate in communication and engagement activities for many reasons, including:

- Building trust and becoming more aware of public perceptions
- Getting others excited about science
- Promoting use of science in decision-making

- Bringing personal meaning to work or building communication skills for other areas of their career

Before you communicate with any audience, you should determine your goal for the engagement. Knowing your goal will help define the audiences you choose to engage with and help you develop the most appropriate messages.

Define Your Audience

“The general public,” just like “scientists” is actually a large, diverse group that can be broken down into smaller segments. An audience might be comprised of children, policymakers, interested adults, individuals from a specific geographic area, potential funders, business leaders, and so on. Your colleagues at the museum will be able to provide insights into visitor goals, experience, interests, and expectations.

By understanding the needs and expectations of your audience, you can best adapt your content, strategy, and frames ahead of time. Consider questions such as:

- How familiar is your audience with the topic?
- What questions might they ask?
- What might they be interested in related to the topic?

Develop Your Message

To translate detailed, complex material into a clear, streamlined structure that resonates with non-scientific audiences, consider the following approach to develop a message. A good message is:

- Miniature: A good message is short. Pick 3 points you want your audience to remember, based on your goal and their interests. You could talk about 3 focuses of your research, 3 results, 3 reasons your work is important, 3 potential applications, 3 societal impacts, etc. This will be the outline of your message.

- **Meaningful:** A good message is meaningful to you and the audience. Once you have picked your 3 points, start your message by explaining the "big picture" or "bottom line" and why the audience should care.
- **Memorable:** A good message is memorable to you as the speaker, and to the audience.

After explaining why the science is meaningful, discuss your 3 points using analogies, storytelling, and as little jargon as possible. These messages should be embedded in a structure – like the Building with Biology activities – that will involve your audience, so they will want to move beyond the bottom-line to explore the topic with you further.

For more science communication tips and resources, visit <http://www.aaas.org/communicatingscience>.