

Using Accessible Language

Scientific language is useful in many contexts, but it often represents an access barrier for end users. Critics argue that overly technical language is not helpful to policymakers, leaders, and other stakeholders who make decisions that could be informed by the research. Jargon interferes with the ability to process information, even when definitions are provided. Jargon also reduces interest in research and makes practitioners or policymakers less likely to take ownership of research and relate to the research community.

Increase clarity

As researchers explore better ways to communicate their work, they are calling for increased language clarity in research communication. Suggested strategies fall into broad categories, including more effective ways to organize documents and recommendations around writing style. For example, writing in the passive voice is less effective because sentences are longer and the subject may be absent or overlooked. The active voice helps your reader more easily understand your message and its context.

Some researchers worry that increasing the clarity of scientific information means that they must oversimplify complex information. Simplified language sometimes lacks the nuance that helps stakeholders to understand new information and act on it. Even when research-based information is presented clearly, stakeholders may not change their attitudes and behaviors in expected ways. However, it still is important to use accurate terminology, even while avoiding jargon. Researchers may assume that the solution is to provide more or clearer information to stakeholders. However, sometimes changing the way you present the information is more effective. In all cases, it is important to realize that stakeholder inaction in response to your findings does not necessarily mean that they are anti-science or anti-intellectual.

Strategies for Increasing Clarity

- ◆ Begin documents with their purpose and bottom line, including necessary background information toward the end.
- ◆ Organize documents into short sections with useful headings.
- ◆ Write brief paragraphs that focus on one topic only.
- ◆ Keep sentences short, feature the main idea first, and keep subject, object, and verb close together.
- ◆ Use active verbs and pronouns, and short, simple words.
- ◆ Use examples, bullet points, tables, and graphic elements.

Effective research communication is not just a matter of disseminating information to stakeholders; it is about creating meaning *with* stakeholders, and the general public's knowledge is valuable and relevant in the research process. While it still is important to consider the clarity of research communication, it is also important to learn new ways of engaging with stakeholders in dialog.



Engage with diverse stakeholders

Informing the attitudes and behaviors of stakeholders relies on more than just the clarity of messages. Researchers play various roles in the communication process. They may disseminate research findings to other professionals, testify as public experts, help stakeholders understand research findings, participate in decision-making, and more. Each of these contexts involves different stakeholder groups, who may be experts in other fields and have their own language, jargon, communication goals, and concerns. In fact, research communication takes place in many different contexts: in conferences and conversations with peers, in the media, at events and meetings, and in reports and products such as briefs.

This requires researchers to develop a process to identify stakeholder groups, understand their needs, and incorporate their language and priorities into communications. A simple way to build an understanding of stakeholder needs, language, and priorities is to attend public events where researchers interact and communicate with those outside of their areas of expertise. For example, attending a local talk on a topic of interest to your stakeholders.

Researchers may also take more formal approaches to ensuring they are communicating clearly. Consider the following strategies:

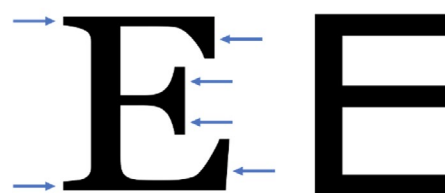
- **Paraphrase Testing:** A stakeholder is asked to read a document prepared by a researcher, and to describe its meaning in their own words. This method is best for brief documents.
- **Usability Testing:** A stakeholder is provided with a hypothetical scenario in which they would need specific information, and asked to use a document created by researchers to find and understand that information. *Example scenario: You learn that a river may be polluted. Find out whether you should report it to a local or national environmental agency. If you do, find out the process for doing so.*
- **Controlled Comparative Studies:** Different groups of stakeholders test different versions of a document. Researchers collect and compare data on how well the stakeholders were able to paraphrase information from and/or use the different versions.

Employing these strategies will enable you to draft content with your audience in mind, check content accuracy, and assess how well your audience will understand your messages.

Strategize to tailor messages

As researchers develop clarity around stakeholder needs, language, and priorities, they can better tailor communication to those audiences. While content is important, research has found that careful design of messages can increase their persuasiveness. For example, it is more effective to introduce familiar concepts before new or controversial findings. Providing multiple options for decisions rather than only one may spur more stakeholders to act. Focusing on the benefits of engaging in a new behavior, rather than the consequences of failing to engage in that behavior, is also more effective in some contexts. The paraphrase and usability testing approaches described above can help researchers to learn which strategies are effective in communicating with their particular stakeholders.

Also, a product's visual design elements can affect the persuasiveness of its messages. It is vital to carefully consider a document's layout and design, including fonts, colors, and imagery. For example, italics can be difficult to read, and sans serif fonts may be more easily read than serif fonts in certain mediums (online versus printed). (A serif is a decorative element at the end of a letter stem. The arrows in the illustration point to serifs.)



As another example, employing strong color contrasts in graphics, as in the image below, can increase the persuasiveness of messages. Remember that color usage and contrast can also affect the accessibility of material to people with sight impairments.



Focus on context as well as content

Language clarity alone is insufficient as a strategy to increase language accessibility in research communication. Researchers should develop processes for engaging with, and understanding the needs and language of, diverse stakeholders. Testing the effectiveness of messages will help researchers to tailor those messages to different audiences. In more accessible terms: Context is as important as content in research communication. When your research project involves diverse stakeholders with different needs, consider approaches toward accessible language. The strategies outlined in this document as well as our online training are critical elements in a comprehensive strategy for research translation. Accessibility lends itself to action, which can mean increased impact for your research translation project.

Additional Reading

- Bucchi, Massimiano, and Brian Trench. 2008. *Handbook of Public Communication of Science and Technology*. Routledge.
- Krieger, Janice L., and Cindy Gallois. 2017. Translating Science: Using the Science of Language to Explicate the Language of Science. *Journal of Language and Social Psychology* 36 (1): 3-13. <https://doi.org/10.1177/0261927X16663256>.
- Neil, Jordan M., Janice L. Krieger, and Thomas J. George Jr. 2017. Innovation or Inconsistency? Framing Colorectal Cancer Guidelines to Improve Public Perceptions of Updated Screening Recommendations. *Journal of Language and Social Psychology* 36 (1): 14-27. <https://doi.org/10.1177/0261927X16663258>.
- PlainLanguage.gov. 2011. Federal Plain Language Guidelines. <https://www.plainlanguage.gov/media/FederalPLGuidelines.pdf>
- Rice, Ronald E., and Howard Giles. 2017. The Contexts and Dynamics of Science Communication and Language. *Journal of Language and Social Psychology* 36 (1): 127-139. <https://doi.org/10.1177/0261927X16663257>.
- Shulman, Hillary C., and Olivia M. Bullock. 2019. Using Metacognitive Cues to Amplify Message Content: A New Direction in Strategic Communication. *Annals of the International Communication Association* 43 (1): 24-39. <http://dx.doi.org/10.1080/23808985.2019.1570472>.
- Shulman, Hillary C., Graham N. Dixon, Olivia M. Bullock, and Daniel Colón Amill. (2020). The Effects of Jargon on Processing Fluency, Self-Perceptions, and Scientific Engagement. *Journal of Language and Social Psychology* 39 (5-6). <https://doi.org/10.1177/0261927X20902177>.