Sharing Planetary Science: Writing for the Public Recommendations and Resources

Revised from American Scientist's <u>12 Tips for Scientists Writing for the General Public</u> by Katie Burke

- Write for the readers, not your colleagues.
- Use your audience's lexicon. Introduce only the terms essential to your story and no more.
 Even certain words likely to be familiar to readers, like "dynamics" or "mitigate," should be avoided just because they sound jargony and can have different meanings in different fields. Look for alternatives that are more direct.
- Avoid talking down to your audience. Sometimes scientists try so hard to make sure
 everyone is on board that it sounds like they're talking to middle schoolers, a big turn-off to
 most readers.
- Avoid passive voice and clunky sentence structures.
- Use the first person.
- Your first sentence must be indelible; create an impression early.
- Know where you are taking the reader first and then tell them. Within the first page, provide them with a story that illustrates what is at stake and sets the scaffolding for your thesis.
- Each subsection and paragraph is a potential pathway into the text for a scanning reader.
 That means the first sentence of each paragraph and each subsection should introduce an interesting new idea with a topic sentence.
- Questions generally make poor topic sentences.
- Each subsection needs to transition the reader from one idea to the next.
- If you want people to understand that a problem addressed by your research affects real people, you need to illustrate the problem by telling a story about real people.
- Include a conclusion. Narrative nonfiction conclusions return to the intrigue, suspense, or line of inquiry the writer established to draw the reader further into the article, providing a sense of closure and wrapping up any loose ends.

Additional Recommendations on Writing

- Consider your audience.
- Consider your purpose.
- Avoid jargon if there is an everyday equivalent.
- Start paragraphs with punchy topic sentences. End paragraphs with sentences that collect what was important and set up what follows. One idea per paragraph.
- Avoid starting with lengthy generalizations.
- Avoid passive tense.
- Avoid using graphs in communications with the general public. If necessary, clarify graphics with captions to explain the significance.



From AAS's What Makes an Astronomy Story Newsworthy?

In *Science and Journalists* — *Reporting Science as News* (Free Press, 1986), Sharon M. Friedman wrote, "Editors and reporters tend to value stories that contain drama, human interest, relevance, or application to the reader, criteria that don't always map easily onto scientific importance."

In *The Hands-On Guide for Science Communicators* (Springer, 2007), Lars Lindberg Christensen offers the following criteria, noting that the more of them are satisfied, the better are the chances that you have a "good story" on your hands:

- Timing: the event has just taken place, or the work has just been published.
- Relevance: the issue has influence on people's lives or on the way they think about the world.
- *Proximity:* there's a local angle for readers, or the event happened in a special location.
- Implications: the result has profound consequences.
- Conflict: the discovery involves a hotly debated topic or resolves a hotly contested issue.
- *Human interest:* there's something special about the scientist or the circumstances of the discovery.
- *Mystery:* the finding involves a mysterious or unexpected phenomenon.
- Significance: an entirely new phenomenon or class of object, or a key finding in a critical field.
- Unusual angle: a new twist on an old result or a quantum leap in certainty about something.
- A record: the discovery is the first, last, oldest, youngest, biggest, smallest, fastest, slowest, etc.
- Sexiness: not in the usual sense, but in the sense that people are always interested, e.g., in black holes.
- Aesthetics: the finding is accompanied by an exceptionally beautiful image or spectacular video.
- Distinguished publication: the work is published in a leading, prestigious journal.
- Coattails: the result is related to, or piggybacks on, something else currently in the news.

In *Making the News* (Westview, 1998), Jason Salzman offers some additional criteria: *novelty, shock, simplicity, humor, involvement of a prominent person,* or *an anniversary.*

Here's a useful way to tell if you have a newsworthy story: In a single paragraph of no more than 75 words, answer the questions who?, what?, when?, where?, why?, how?, and, most importantly, so what?, then show it to someone who isn't an astronomer. If they are intrigued, you've got news.

AGU has a number of related resources:

- Writing a Plain Language Summary
- Essential Tips and Tools for Communicating Your Science
- Storytelling 101: What's in a story (and how does my science fit in)?

