

Public Science Communication

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Some Means of Public Science Communication

- Print media: newspapers, magazines, etc
- Broadcast media: radio and television
- Internet: websites, social media, etc
- Museums and science centers
- Science festivals
- Lectures, science cafés, etc
- One-on-one discussions
- Other

Some Reasons to Communicate Specialized Information to the Public

- Interest to public
- Usefulness to public
- Chance to foster support of your field
- Chance to attract people to your field
- Obligation if work is publicly funded
- Enjoyment of doing so
- Other

Some Principles

Analyze the audience.

- “The public” isn’t uniform. Gear what you say and how you say it to your audience.
- Some questions to consider:
 - What do group members care about?
 - What do they already know?
 - What are their demographics (age, socioeconomic status, educational level, etc)?
 - What other features might be relevant?

Use mainly simple, familiar language.

- In general, use short, simple, familiar terms.
 - Fundamental → Basic
 - Fabricate → Make
 - Utilize → Use
- In general, minimize use of abbreviations.
- In general, avoid specialized scientific terms.
- However, use specialized terms if learning them might help audience members (example: readers of a handout for patients).

Define unfamiliar terms.

- In general, follow unfamiliar terms with (simple, clear) definitions.
- Alternatively, present the concept first and then state the term. (Doing so can help avoid intimidating the audience.)
- Consider putting new terms in *italics* or **boldface** to help them stand out.
- Consider including a glossary or a table of terms.

Relate unfamiliar ideas to familiar ones.

- Build on audience members' existing mental framework.
- For example, use analogies.

Include people.

- Commonly, members of the public care more about other people than about abstract concepts.
- Include the researchers, not just the research.
- Show how things affect people.
- Consider using “I”, “we”, and “you”.
- If appropriate, quote people.
- If appropriate, include stories about people.

Include narrative. (Tell stories.)

- If appropriate, use of the storytelling traditions/preferences of your audience.
- Consider presenting research as a story.
- Include anecdotes (little stories) to support points and enliven what you are saying.
- Of course, if you're talking about patients, either conceal their identities or get their permission.

Consider the visual aspect.

- Consider including visuals when communicating directly with public audiences.
- Have visuals available to journalists
 - For them to use or adapt
 - To aid in their understanding
 - To help them come up with verbal images
- Keep the visuals simple, understandable, and acceptable.

Check with the audience.

- For instance, show drafts to people like the audience or rehearse presentations for them. Then try to elicit their understanding.
- Check whether journalists grasped your points. (More about that later in this talk.)
- If community advisory boards exist, consider consulting them.
- For major communications, consider using focus groups or other research tools.

Working with the Media: Some Suggestions

Obtain background information.

- The reporter's medium (for example, newspaper or TV; also, quality of the medium)
- The reporter's background (for example, science reporter or general reporter)
- The reporter's task (for example, a brief comment for a story on someone else's work or a long article on your work)
- The reporter's deadline (for example, next month or next hour)

If feasible, provide some written information.

- Now usually easy to provide quickly, for example through email or websites
- Generally should be non-technical
- Helps the journalist
- Helps ensure accuracy
- Promotes effective, efficient interviewing

Present information in a way directly understandable by the public

- Helps the journalist
- Helps avoid the distortion that can occur when information is “translated”

Consider the visual aspect

- If appropriate, provide visual (or audio) materials
 - To aid the reporter's understanding
 - For potential use or adaptation in the story
- If you'll be interviewed on camera, consider
 - The setting (Will it be effective on camera? What message does it convey?)
 - Your clothing and appearance

Perhaps check the reporter's
understanding.

- Provides a chance to provide clarifications
- Should be done tactfully

If there's a main point you want to make, find a way to make it.

- Before the interview, identify the key message(s) you want to convey.
- Consider “bridging” from questions on related topics.
- Often journalists ask for final comments; have a possible response ready.

Offer to review a draft for accuracy.

- Be willing and available to review drafts for technical accuracy.
- Realize that
 - Journalists at some popular media are not allowed to obtain such review.
 - Public information staff at institutions often routinely obtain such review.
- In general, comment only on scientific accuracy, not writing style.

Perhaps provide feedback after the story is published, posted, or broadcast.

- If there's an important error, perhaps (politely) let the journalist know, so he or she can avoid it in the future.
 - Realize, though, that a story for the popular media cannot be as exact and complete as a journal article.
- If a story is especially good, perhaps compliment the journalist.

A Resource:
SciDev.Net Practical Guide:
What Journalists Want from
Scientists and Why

Writing for General Readerships

Popular Writing: Some Tips and Techniques

- Analyze the target publication.
- Obtain instructions online or from the editor.
- Provide human interest—for example, by including
 - Patients
 - Doctors or other health professionals
 - Researchers
 - Others
- Use some narrative.

Popular Writing: More Tips and Techniques

- Provide overviews before details.
- Relate the unfamiliar to the familiar—for example, through analogies.
- Include examples.
- If appropriate, intersperse “goodies” such as quotes and anecdotes.
- Make relationships clear:
 - Make reasoning explicit.
 - Use transitions effectively.

Writing for the Public (cont)

- Present numbers and sizes effectively:
 - Use familiar units.
 - Compare sizes with those of familiar items.
- Counter misconceptions respectfully.
 - Acknowledge plausibility of the belief.
 - Show the belief's inadequacy.
 - Show the merits of the more scientifically founded view.
- Note sources of further information.

Thank You!