ScienceNews

Teacher Background Sheet: Science Journalism

This activity relies heavily on students understanding concepts of science journalism. Use this background sheet to introduce and discuss these concepts with your students.

Finding a story

How do science reporters and editors decide whether a research finding is newsworthy? They ask questions. Is this a new discovery? Do these new research findings contradict what scientists have always believed about a subject? Will this finding save lives or change how people go about their lives? Is this something fascinating that people might simply enjoy knowing?

The science journalist's job is to explain discoveries in ways that people who are not experts can understand. More importantly, a journalist has to convey why a finding might be interesting or important. It is what journalists call the "so-what factor."

Sources

Science writers, like all journalists, gather their facts from many sources. Interviews, scientific presentations, press releases, databases and tips from researchers are all useful. Good reporters are especially skilled at using the scientific literature to find and interpret newsworthy stories.

Scientific literature includes studies that are peer-reviewed, a process in which scientists in a field carefully read and critique the work of their peers before it is published in a scientific journal. Peer review helps to prevent sloppy science and bad mistakes from being published. Scientists (and reporters) consider a study that has gone through the peer-review process to be more authoritative than a study that hasn't undergone such scrutiny.

Most scientific studies include an abstract, results and references. Generally, there are sections for discussion and materials and methods. The abstract is a synopsis of the work; the results section covers the findings, and the reference section cites papers related to the work presented in the article. The discussion section provides context and explains the implications of the research. Materials and methods address how the work was done. A scientific study is a primary source because it is a first-hand account of the researchers' work.

What scientific writing and journalistic writing have in common is they both are forms of expository writing. They both aim to explain in a factual way. However, they differ in tone and sometimes in voice.

Anatomy of a news article

A basic science news article typically includes a lede, a nut graf, results or evidence, background information and sometimes quotes from the researchers who did the work and others who interpret the work's importance. The lede (or lead) is the first sentence or two that hooks a reader into an article. The nut graf lets the reader know what the article is about and why it matters. This paragraph is often where

the reader finds answers to the classic journalism questions: Who? What? When? Where? Why? How? The results section highlights research findings. The background includes interesting facts or information that helps put the new findings in context, and the quotes can come from the scientific article or from interviews. A news article is a secondary source; the journalist did not do the research that produced the scientific results.

So how might a journalist use a scientific study to write a news article? The abstract and discussion sometimes provide ideas for a lede. Information from the results and discussion sections could be the germ of a nut graf. Journalists generally include results to provide the evidence that will give their article credibility. The discussion session can give the journalist ideas for interview questions; the reference list gives journalists more options for background reading and ideas for people to interview.

There is no right way to tackle the dissection of a scientific study. Journalists approach the task in their own unique ways, and sometimes they highlight completely different aspects of the same research. What matters is that journalists produce articles that are factually accurate, engaging and written at a level suitable for the intended audience. If a journalist has done an outstanding job, the reader will know why they should care about the findings after reading the article's first few paragraphs.