

Press Release or News Article: What's the Difference?

Lesson

In this lesson, students examine the differences between a press release and a science news article and consider the importance of distinguishing the two.

Objective: Students will recognize the differences between a press release and a science news article.

Materials: Power Point program *The Story of the NewDiscovery*
Press Release Detector
ITEM A *Scientists cast doubt*
ITEM B *New blow for asteroid theory*

Time: one 50 minute class period, or four 10-15 minute mini-lessons

Background

Many science, technology and medical news stories begin with a press release or press event - an announcement from an institution, company or government agency of something new and exciting. Reporters treat press releases and events as a single, often credible source. To complete the story they would look for other credible sources to comment on the work.

On some websites, what is called a news story is really a press release with little or no changes. For example, stories on sciencedaily.com, scienceblog.com, esciencenews.com, and docguide.com are really press releases used as free content - ads are sold around them.

Press releases are not necessarily bad. They are often well-written and carefully vetted before publication. At best, they are one-sided; they tend to hype their news as more accepted or successful than the broader scientific community might see it. At their worst, they promote a product or false information.

An array of press releases can be found at www.eurekaalert.com, www.futurity.org, and www.sciencedaily.com.

Getting Started

Note: This lesson can be taught during an entire class period, or divided into 10-15 minute mini lessons (4), taught over a period of several days.

Mini-lesson 1

Review with students the different forms of science writing and reading.

Mention text books, lab reports, research reports, research journal articles, science news articles in newspapers, magazines and on the internet.

Ask if anyone has heard of a press release. Share ideas. Point out that press releases are not just written for science issues. They are ways that universities, companies, or government agencies announce something new and exciting. Many science news articles are written as a result of a press release.

Addressing the Topic

Introduce the power point program. Explain that it is rather simplistic and old-fashioned; something like an old filmstrip shown to children. However, let the students know that there are some important ideas about science writing that may be useful for them later.

Show the power point program, *The Story of the New Discovery*. Have fun with the text!

Mini-lesson 2

Following the power point, recap for the class:

So, a discovery is made - a press release is issued announcing the discovery - and science journalists write articles based upon the press release and ideas from others.

Ask: What does a press release NOT do?

A press release does not generally answer the tough questions - questions about adverse costs, or long-term effects, or negative results involving dangers or hazards to people or the environment.

It does not include the voices of others beyond the research.

Ask: What should a well-written science news article include that a press release does not?

A science journalist will include ideas and opinions of others not related to the research. Also included might be answers to the tough questions - the 'yes, but' questions that might make the discovery not as special or important as the press release might indicate.

With the class, generate a list of 'yes, but' questions a journalist might ask about a press release. Record for later use. Include:

yes, but . . .

- what about the costs?*
- what are the long-term effects?*
- what are the risks?*
- have others found different ways to do the same thing?*
- is this really the most up-to-date discovery?*
- are these only preliminary results?*

- *is there a general sense of consensus in the scientific community? What do others think?*
- *when will this be available?*
- *how was this discovered?*
- *what are the financial interests?*

Ask: So, how can we tell the difference between a press release and a science news article? Why is it important?

Accept reasonable answers.

Distribute *Press Release Detector*

Briefly discuss.

Mini-lesson 3

Show a press release on the screen and do a read aloud / think aloud.

Use *Our Solar System's Not So Unique*

<http://www.futurity.org/science-technology/our-solar-systems-not-so-unique/>

During the read aloud, discuss with the class the press release features that might distinguish this from a science news article.

- *It originates at the University of California, Berkeley; the research institution*
- *The only sources are the researchers*
- *A google search of the first sentence yields links to numerous news outlets repeating the press release*

Look back at the list of 'yes, but' questions. Do any apply?

Next, go to <http://www.bbc.co.uk/news/science-environment-11647089> This is a link to a science news article published by the BBC in response to the above press release.

- *it draws heavily from the press release*
- *the BBC actually interviewed Dr. Howard for this story and includes a direct quote not included in the original press release (see paragraph 7 " . . . he told BBC News."*
- *the BBC article also includes the opinion of an outside source not connected to the research; Dr Robert Massey of the Royal Astronomical Society.*

(During this lesson, have students refer to the *Press Release Detector*)

Distribute ITEM A and ITEM B. Explain to the class that one is a press release and the other is an article written in response to the press release.

Instruct students to work in pairs and look for:

- differences in sources within each
- differences in tone
- which seems more sure of the conclusions

- which looks at opposing viewpoints
- which asks one or more 'yes, but' questions

Ask students to decide which is a press release and which is a resulting news article.

(Item A is a science news story published on BBC News Online. Item B is the original press release published by the National Science Foundation.)

Follow-up

Mini-lesson 4

To view how prevalent press releases often serve as news stories, demonstrate or have students go to eurekaalert.org (a site which contains press releases) and choose a press release that might be popular. Typically, a medical, health or astronomy press release will get a lot of attention. Or, for curricular connections, search for press release topics related to concepts being addressed in class. Copy the opening sentence or two and perform a google search on the words. Ask students:

- How many sites contain the same language?
- Click on a few of the sites. Do they all identify the source of the story as a press release?

Why do you think some sites hide that the story is a press release?

Direct students to try this activity with a variety of press releases.

ITEM A

Scientists cast doubt

New data suggests the Chicxulub crater in Mexico, supposedly created by an asteroid collision, predates the extinction of the dinosaurs by about 300,000 years.

The authors say this impact did not wipe out the creatures, rather two or more collisions could have been responsible.

The report is published in Proceedings of the National Academy of Sciences.

An international group of scientists led by Professor Gerta Keller, of Princeton University, US, looked at a continuous sequence of rock - a core - drilled out of the Chicxulub structure.

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Professor Keller and her team contend their findings prove the Chicxulub impact did not by itself trigger the extinction of the great beasts.

Instead, they believe a cooling of the global climate shortly followed by a period of greenhouse warming placed enormous stress on the dinosaurs.

Understandably, the team's conclusions have met with strong opposition . . .

"It appears to contradict many other lines of evidence that seem rather unambiguously to indicate that the [Chicxulub] crater formed at the K-T boundary," said Dr. David Kring of the University of Arizona, US.

Professor Alan Hildebrand of the University of Calgary, Canada, told BBC News Online: "[This theory] has survived every test. The asteroid that made Chicxulub acted alone."

Professor Hildebrand and Dr. Kring were authors of the 1991 paper proposing Chicxulub as the site of the K-T boundary asteroid strike.

Strong supporting evidence comes from molten material laid down at the K-T boundary in rocks from Haiti which is similar to deposits from the Chicxulub crater.

In addition, debris thrown out by this collision gets thicker the closer you get to Chicxulub like a trail pointing to the impact site . . .

ITEM B

New blow for asteroid theory

Impact didn't lead to mass extinction 65 million years ago, geologists find.

The enduringly popular theory that the Chicxulub crater holds the clue to the demise of the dinosaurs, along with some 65 percent of all species 65 million years ago, is challenged in a paper to be published in the *Journal of the Geological Society* on April 27. The crater, discovered in 1978 in northern Yucatan and measuring about 180 kilometers (112 miles) in diameter, records a massive extra-terrestrial impact.

When spherules from the impact were found just below the Cretaceous - Tertiary (K-T) boundary, it was quickly identified as the "smoking gun" responsible for the mass extinction event that took place 65 million years ago.

It was this event which saw the demise of dinosaurs, along with countless other plant and animal species.

However, a number of scientists have since disagreed with this interpretation.

The newest research, led by Gerta Keller of Princeton University in New Jersey, and Thierry Adatte of the University of Lausanne, Switzerland, uses evidence from Mexico to suggest that the Chicxulub impact predates the K-T boundary by as much as 300,000 years.

"Keller and colleagues continue to amass detailed stratigraphic information supporting new thinking about the Chicxulub impact, and the mass extinction at the end of the Cretaceous," says H. Richard Lane, program director in the National Science Foundation (NSF)'s Division of Earth Sciences, which funded the research. "The two may not be linked after all." . . .

"We found that not a single species went extinct as a result of the Chicxulub impact," says Keller.

This conclusion should not come as too great a surprise, she says. None of the other great mass extinctions are associated with an impact, and no other large craters are known to have caused a significant extinction event.

Keller suggests that the massive volcanic eruptions at the Deccan traps in India may be responsible for the extinction, releasing huge amounts of dust and gases that could have blocked out sunlight and brought about a significant greenhouse effect.

Press Release Detector

*Press releases and articles can be partners in science journalism.
But there are important differences.*

Press releases are published by universities, organizations, or government agencies to announce important discoveries or events.

Most press releases look and sound and smell like actual science news articles (*some newspapers simply reprint the news release as if it were an article*). But, a press release and an article can be vastly different!



Use the comparisons below to determine if what you are reading is a press release or an authentic science news article.

Press Release	Well-Written News Article
Published by a university, research organization, or government agency	Published by a reputable news organization like CNN, BBC, New York Times, etc.
Positive portrayal of the research and discovery - findings are placed in a positive light.	Asks the tough questions - How expensive, dangerous, accurate, risks? The <i>yes, but</i> questions.
Usually not skeptical or negative about the research or discovery.	Maintains a skeptical and neutral view while reporting on the research, the researchers, or the discovery.
Biased in favor of the university, research organization, government agency, or source of funding.	Little if any bias.
Few if any outside sources - sources included are connected (research partners, university, funding source, etc.).	Includes multiple attributions of outside sources (voices) with varying viewpoints and perspectives.

A well-written science news article looks at the topic from multiple perspectives, with varying viewpoints and voices.

A press release may be a credible source of information, but it is only a start. Well-written science news articles will include more!