

Read Aloud / Think Aloud

Lesson



One of the best ways for students to glimpse inside the head of a reader is through read aloud / think alouds. When the teacher reads to the class, pauses and thinks out loud the things readers think and wonder about, she models for her students ways to effectively interact with the text.

In addition, selected articles that are of relevance to course content demonstrate to students that science is indeed on-going, current, and dynamic.

Objective: Students will participate in a read aloud / think aloud session during which they will consider reasonable responses to science articles being read.

Materials: One or more current and relevant science news articles available to show on screen and/or print to be distributed to students.

Sources for science news articles include:

www.scijourner.org (the official news site of SciJourn)

www.nytimes.com/pages/science

www.sciencenews.org

www.sciencenewsforkids.org

www.discovery.com

www.sciencedaily.com

www.livescience.com

www.ScientificAmerican.com

www.sciencenow.sciencemag.org

plus many more!

Press releases

www.sciencedaily.com

www.eurekalert.org

www.futurity.org

These websites are sources of press releases from research institutions. Press releases usually lack the unbiased critical view that science journalists offer.

Background Information

Read aloud / think aloud is an effective way to help students consider appropriate responses to materials that are being read. For an effective read aloud, the teacher must be prepared to model for the students the processes of reading, responding, and thinking about the content being read. Shown below is a transcript of a portion of a read aloud / think aloud session during

which one of the articles in the packet was used. Please note that this is only an example. There are multiple ways to effectively communicate to students how a science news article might be read and interpreted.

Dangerous Pathogens Live in Showerheads

TEACHER: hmmm, I wonder *how* dangerous . . . and I just took a shower this morning . . . let's read . . .

ARTICLE (as read by teacher): It's warm and damp and dark - the perfect place for bacteria to nestle and stay for a while.

It turns out that that's just what they do -- in your showerhead.

TEACHER: That's an interesting lede . . . it really has me interested in this article. Have any of you heard about this topic before?

STUDENTS: no . . .

ARTICLE: What's more, says a new study, the mucky film of microorganisms lining the inside of your showerhead often harbors bacteria that can cause lung disease, including a cough, fever, fatigue and weight loss.

TEACHER: a new study . . . by whom . . . I wonder if this is really true . . .

ARTICLE: These mycobacteria . . .

TEACHER: hmmm, I'm not sure what those are . . . maybe the article will tell us . . .

ARTICLE: close relatives of the bacterium that cause tuberculosis -- can be more than 100 times more prevalent in showerheads than in the water in the pipes just upstream, according to the research, published in *Proceedings of the National Academy of Sciences*.

TEACHER: The National Academy of Sciences . . . have any of you heard of this?

They're pretty reputable . . . I trust what they say about scientific ideas . . . Should we stop here or keep reading?

STUDENTS: keep going . . .

ARTICLE: Infections with such non-tuberculosis mycobacteria have risen in recent years, up six fold since 1997, according to another study. The bacteria don't threaten healthy people, but those with cystic fibrosis, AIDS, recent organ transplants or other immune-compromising conditions are at risk of an infection.

TEACHER: Are there any questions so far from reading this article?

STUDENT 1: How do the bacteria get there?

STUDENT 2: Even though it says you're safe if you are healthy, do the bacteria spray down on you during your shower . . . onto your face?

TEACHER: Let's see what else it says . . .

ARTICLE: "There's been a growing voice in the medical field hypothesizing that showering has caused some of this increase," said the study's lead author, Leah Feazel of the University of Colorado, Boulder. "One hundred years ago, people bathed, they didn't shower."

The problem is not just that the microorganisms are enriched in the showerhead, Feazel said. It's also that the spray nozzle creates a fine mist of tiny water droplets. "These tiny, tiny particles can go all the way into your deep lungs," she said.

STUDENT 3: So do they live in your lungs and grow?

STUDENT 4: That's gross . . .

TEACHER: There's more . . . listen to this . . .

ARTICLE: "Most of us are in the shower long enough to inhale a fairly reasonable amount of mycobacteria," Joe Falkinham of Virginia Tech in Blacksburg told Discovery News.

TEACHER: Another expert . . . How many of you think this really is true?
(Most students raise their hands) I believe it too . . . it's pretty credible . . . Shall we read more? (The students want to continue)
TEACHER: (continued reading the article to the class)

The teacher read the article to the class - stopped at key places with questions of her own - asked if the class wanted to go on - and invited the students to participate in the reflections.

If the teacher finds the article boring, or if the students want to move on to another article, it is fine to do so - and also authentic. Readers pick and choose what they read based upon interest or need to know. They also abandon things that may not seem useful.

Getting Started

Ask the class if any students read science news articles.

If any hands are raised, ask those students where they find the articles they read.

Sources of science news articles might include the internet, science news magazines or the newspaper.

Tell the students that today we will read and discuss several science news articles that were found on the internet.

Addressing the Topic

Distribute one or more of the science news articles if printed. Briefly describe the articles selected for today's readings. Ask the students to identify an article that they would like to read. (This offers a degree of ownership of the experience. Once the students understand that they have input about the article to be read and can help decide if that article is abandoned, they will assume a shared experience with the teacher.)

Read the article with numerous stops (as shown in the example above). Invite the students to offer questions and comments as the news article is read.

Select and read additional articles as time permits.

Follow-Up

Ask the students to be on the lookout for interesting articles that can be read together in class or to be posted on a bulletin board of science news topics. Later, invite students to lead a read aloud / think aloud in class.