Web Exploration: Finding and Communicating Scientific Information

Explorelearning

Learning goals

After completing this activity, you will be able to ...

- Assess the reliability of a website.
- Find scientific information on the Internet.
- Communicate scientific information in the form of a presentation.

Assessing the Reliability of a website

There are vast amounts of information online, which makes the Internet an ideal tool for research. However, it is important to remember that many websites contain inaccurate or misleading information. Because of this, it is important to assess the reliability of any website you use as a source for scientific information.

In general, some of the most accurate information can be found on the websites of schools (which typically have a URL ending in ".edu") and government agencies (which typically have a URL ending in ".gov"). URLs ending in ".com" are owned by businesses. Thus, the information they provide is more likely to be biased towards their product or service.

When assessing a website, ask the following questions:

- Who is the sponsor of this website?
- What is the level of expertise of the website's author?
- When was the website last updated?
- What point of view is presented by the website?

In addition to asking the above questions, also try to find a second or third source to confirm any information you get from the website. This will help you confirm the accuracy of the information.

Perform Internet Research

Find reliable internet resources to research one of the following questions:

- How can the interference that occurs between acoustic waves be used to improve the design of a concert hall?
- How does the structure of water relate to its chemical properties?
- What are some benefits and disadvantages of using automobiles powered by hydrogen fuel cells?





Put Together a Presentation

Use your research to create a short slideshow (such as a PowerPoint presentation), web page, or bulletin board that details the answer to the question. Include the following information in your presentation:

- The question
- The research you uncovered regarding the question
- Your answer to the question
- a "Works Cited" sheet or slide

Share your presentation with your class. After viewing your classmates' presentations, discuss which types of websites were most helpful during your research and how you were able to confirm their reliability. If a classmate did a presentation on the same question as yourself, but came up with a different answer, compare your sources. Try to determine which sources seem to be more accurate and why.

