

Instructional Strategies for Critically Evaluating Online Information



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Welcome to the hands-on portion of this session!

Below you will find several definitions and activities associated with the online critical evaluation tasks that research suggests are particularly challenging for students who read information to learn on the Internet. We will explore each of these activities during our time together, taking time to network with other teachers to reflect on how best to support these important online reading strategies with your students.

Online Reading Comprehension Strategy Instruction to Support Aspects of Critical Evaluation

- **Challenge 1:** [Evaluating Relevancy: Reading search engine results](#)
- **Challenge 2:** [Evaluating Relevancy: Previewing a website](#)
- **Challenge 3:** [Evaluating Accuracy: Verifying/refuting author claims](#)
- **Challenge 4:** [Evaluating Reliability: Investigating author credibility](#)
- **Challenge 5:** [Critically Evaluating Online Information \(Level 2\)](#)
- **Challenge 6:** [Evaluating Bias: Separating fact from opinion](#)
- **Challenge 7:** [Developing an overall healthy skepticism \(Level 3\)](#)

[Download activity sheets](#) (in MS Word) that accompany these lessons to modify and use with your students.

You can learn more about the use of online critical evaluation strategies by exploring the resources below:

- Coiro, J. (2003). [Rethinking comprehension strategies to better prepare students for critically evaluating content on the Internet](#). *The NERA Journal*.
- Coiro, J. (2005). [Making Sense of Online Text](#), *Educational Leadership*.
- Clemitt, M. (2008). [Internet Accuracy](#). *CQ Researcher*.
- [Other Issues to Consider](#)
- [Instructional Models and Practices for Developing New Literacies of Online Reading Comprehension](#)
- [Internet Reciprocal Teaching](#)

Defining Aspects of Online Critical Evaluation

The following definitions can serve as common language for you and your students as you begin sharing strategies for how to read critically on the Internet.

- **Relevancy:** the information's level of importance to a particular reading purpose or stated information need
- **Accuracy:** the extent to which information contains factual and updated details that can be verified by consulting alternative and/or primary sources
- **Reliability:** the information's level of trustworthiness based on information about the author and the publishing body
- **Bias (perspective):** the position or slant toward which an author shapes information

- **Commercial bias:** the extent to which information appears to be influenced by commercial interests for or against a certain product

Challenge 1 - Evaluating Relevancy: Reading Search Engine Results

Question: Which link is most useful?

Learning Objective: Evaluating search results

- What clues do the words after the link provide?
- Are the results in any special order?
- Who sponsors the site?
- What's missing from this list?
- How do you know and why is it important?



Activity

Apply these questioning strategies to the list of search results in your handout. Try this activity with your students on paper even 2-3 times and then check to see how they transfer their new skills when reading online for information related to your curriculum.

Challenge 2 - Evaluating Relevancy: Reading Within A Website

Question: Where do I read first?

Learning Objective: Previewing a website

- STOP and THINK!
- Read the title of the page and the title of the website in the margin at the top of the window.
- Scan menu choices. Hold your mouse over the navigational menus on the left frame or across the top of the window, but don't click yet. Get a big picture of the information available within the site.
- Make predictions about where each of the major links may lead and anticipate a link's path through multiple levels of a website.
- Explore interactive mouseover features that may reveal additional levels of information contained within the site.
- Identify the author/webmaster/sponsor and consider what this information indicates about the site.
- Notice and try out any internal search features like an organizational site map or an internal search engine.
- Make a judgment about whether to explore the site further. If the site looks worthwhile, decide which areas of the site to explore first. If the site does not look worthwhile, return to a search engine to refocus, revisit your reading goals, and refine your search.



Demonstrate: [NASA](#) (note the changes from 2005 to 2007 that require "new literacies")

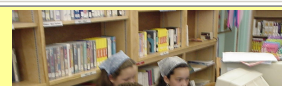
Activity

Imagine... you want your students to get more involved with community service and to network with other youth volunteers around the country. You will have one minute to preview each of the websites using the strategies above and rank each website according to its relevancy to your needs (0=lowest, 3=highest). Provide details to support your decision. Then, identify two parts of the "best" website that you believe would be most relevant for your students.

[Site 1](#) [Site 2](#) [Site 3](#) [Site 4](#)

Challenge 3 - Evaluating Accuracy: Reading to Verify Online Information

Question: How do I verify or refute the author's claims with another reliable source?



Learning Objective: Cross-checking factual data



- STOP and THINK!
- Ask probing questions:
 - What claims is the author making?
 - What evidence do I find elsewhere to support these claims?
 - What evidence do I find elsewhere to refute these claims?
- Cross-check factual data with at least three other reliable sources
- Consider the context of where you found the evidence (primary/secondary source; variety of online genres) and how that context might influence the information
- Consider the unique ways to search for information on the Internet to confirm or refute claims (e.g., refined search terms, [linkto: search commands](#), www.snopes.com)

Activity

Imagine you are selecting websites for your students to use as part of their online research for their reports on strange animals. Apply the above questioning strategies to the websites below to verify or refute the accuracy of each author's claims. Be prepared to provide evidence for your decisions.

- Demonstrate: [Pacific Northwest Tree Octopus](#)
 - Consider the context:
 - [CafePress](#)
 - [The Information Literacy Land of Confusion](#)
 - [Museum of Hoaxes](#) and [Happily Oblivious](#) and [The Other 95%](#)
 - See also [Tentacled Tree Hugger Disarms Seventh Graders](#) and the [actual study findings from the New Literacies Research Team](#)
- On Your Own
 - [Rock Nest Monster](#)
 - [The Elephant Art Gallery](#) (Related [Video](#))
 - [Armed and Dangerous Dolphins](#)



Challenge 4 - Evaluating Reliability: Investigating the Author's Credentials

Question: Who created the information at this website and what is his/her level of expertise?



Learning Objective: Investigating the author's credentials

Activity

Locate the "About Us" link on each website below. Complete the activity in your handout by following these steps:

- identify the name of hyperlink that led you to information about the website's creator;
- tell one thing you learned about the author's background and level of expertise;
- search off the website for the author's name and tell one other thing you learned about the author;
- is there anything about the site that appears to increase or decrease the reliability of the information found there? (please explain)
- rate each author's level of expertise from 1 (lowest) to 5 (highest) and be prepared to justify your decision with evidence.

- Demonstrate: [Summer Olympic Sports](#)
- On Your Own
 - [Pathways to Freedom: The Underground Railroad](#)
 - [Biographies for Kids: Famous Leaders for Young Readers](#)
 - [The Healthy Refrigerator: Open the Door to a Healthy Heart](#)
 - [The First Male Pregnancy Site](#)



Challenge 5 - Critically evaluating online information: Level 2 (Integrating strategies for evaluating reliability and accuracy)

Question: How do I know if the information is useful for my research?

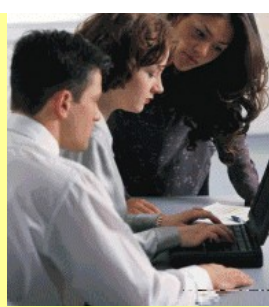


Learning Objective: Integrating strategies for verifying the

accuracy of information and author's level of expertise

Activity

1. Work with your group to brainstorm strategies for critically evaluating the information at a website. Create a list of these ideas in your handout.
2. See if you can determine if each of these sites is real or not real (there are some of both). Avoid relying only on your prior knowledge - since often your students will not have this knowledge to rely on or it is inaccurate.



If you determined that it is real, what evidence do you have to prove it? If you think it is a hoax, how do you know for sure?

Site A: [Boilerplate Mechanical Marvel of the 19th Century](#)

Site B: [Dog Island](#)

Site C: [Natural Science Center of Greensborough](#)

Site D: [True but Little Known Facts About AIDS](#)

Site E: [Microsoft Firefox](#)

Site F: [Moths and Sleeping Birds](#)

Site G: [The Ova Prima Foundation](#)

Site H: [The Ginormous Snail](#)

Site I: [Youthworks: Christian Missions and Community Service](#)

Site J: [Google's Ranking Technology](#)

3. Share with the larger group the strategies that helped you determine the quality of information at each website. Add to your own list any new strategies you learned from someone else in the group.

Challenge 6 - Evaluating Bias: Separating fact, opinion, and perspectives that influence an author's position

Question: How does the author shape the information at this website?

Learning Objective:
Exploring varying perspectives on a topic

Activity

Explore each website related to the Iditarod dog sled races as you complete the four tasks described below...



- Ray Redington's Dog Care (see the powerpoint screenshot - this site has gone offline)
- [Racing for the Grave](#)
- [Scholastic's Is the Iditarod for the Dogs?](#)
- **Detecting/Separating Fact vs. Opinion:** Tell which website you think has the STRONGEST opinions about the use of sled dogs in the Iditarod. Tell whether you think the author of the website you chose is for or against racing sled dogs for competition. Select a quote from the website you chose and explain why you think it is an example of the author sharing strong opinions.
- **Detecting Bias and Considering the Author's Affiliation:** Tell which website (Site A, B, or C) gives opinions from more than one side of the issue. Who are the two people whose opinions are given in the website you chose in number 1? What factors make these two people feel the way they do about the treatment of sled dogs ?
- **Detecting and Determining Author's Purpose:** Use your handout to identify the general and specific purpose(s) of each site and provide at least two reasons to support your answer.

Part B. Try It Out - Reading Critically to Negotiate Multiple Perspectives

How do different authors portray the Japanese Internment Camp Experience to readers?

View the sample [Webspiration Activity Organizer](#) (links activated by invitation only)

Links to multiple perspectives:

- 1942: [Lt. G.J. DeWitt Final Report](#)
- 1999: [Children of the Camps Documentary](#)
- 2008: [Thinkquest: Japanese Internment Camps and Their Effects](#)
- 1998: [Military Justification: Internment of Ethnic Japanese in WW2](#)

- 2001: [A More Perfect Union: Japanese Americans and the U.S. Constitution](#)
- Choose a partner, select a resource from the list, refer to your handout, and share with your group answers to the following questions:
 - **Reading Within A Perspective**
 - Who (individual and/or organization) created this source?
 - What motivated the author to create this source?
 - What is the author's key point(s)?
 - What techniques does the author use to make you understand the topic in a particular way? See listing of [persuasive techniques](#) for ideas.
 - **Reading Across Perspectives**
 - How does this author's perspective compare to other sources you have read? To help you compare the ideas, you might use Inspiration to sort, label, and elaborate on your connections between your assigned set of readings.
 - Where do YOU sit on the issue of Japanese interment during World War II, in relation to the set of perspectives you have read.
- Consider how you might use the website <http://www.procon.org> to facilitate your students' understanding of the multiple perspectives people have about controversial issues. With your group, brainstorm other "controversial" topics in your grade level curriculum that could be used to give students more practice with detecting and comparing author affiliations and their related claims while negotiating multiple perspectives encountered on the Internet.

Challenge 7 - Evaluating the quality of online information: Developing an Overall Healthy Skepticism (Level 3)

Question: How can I judge the overall quality of information I have located on the Internet?

Learning Objective: Integrating strategies for...

1. **verifying the accuracy of the author's claims**
2. **evaluating the author's level of expertise to make those claims**
3. **determining author's purpose and its influence on stated claims**



Pulling it all together: Investigate one or more of the websites below while considering the answers to the following questions:

- What is the purpose of this site?
 - Who created the information at this site?
 - When was the information at this site last updated?
 - Where can I go to check the accuracy of this information?
 - Why did this person, or group, put this information on the Internet?
 - Is there anyone that might be offended or hurt by the information at this site?
 - Does the website present only one side of the issue, or are multiple perspectives provided?
 - How is the information at this site shaped by the stance taken by the creator of the site?
- Demonstrate: [Athletes.com](#) or [Carbon Monoxide Headquarters](#)
 - On Your Own
 - [National Wildlife Federation](#)
 - [Martin Luther King, Jr: A True Historical Examination](#)
 - [Kids Web Japan](#)
 - [Conservapedia](#)

Related resources:

After today's session, you may wish to explore an additional [resource for evaluating online information](#) and a wealth of other tools and learning modules created by the [21st Century Information Fluency Project](#)

- [Hoax sites and lesson ideas](#) to use with your students
- [Tentacled Tree Hugger Disarms Seventh Graders](#)
- An [Internet Reciprocal Teaching Lesson](#) for Online Critical Evaluation created by Jill Castek, a



member of the New Literacies Research Team

- Snopes.com
- [Better Read That Again: Web Hoaxes and Misinformation](#)

This page was created on February 14, 2009 by [Julie Coiro](#)