21st-Century Skills

Understanding Digital Resources

Overview

In this activity, individuals evaluate search engines to answer the questions "Why is it important to know how search engines work?" and "How do search engines affect the way I find information?".

Materials

- Not All Search Engines Are Alike article
- Search engine results
- <u>Search Engines Discussion Prompts</u>
- Five Terms Discussion Prompts

21st-Century Skills Targeted

- Information Literacy
- Media Literacy
- Technology Literacy

Steps

Prior to this activity, conduct a search on Google, Bing, and Yahoo! (or three other search engines of your choosing) for five terms or phrases from current discussions in this class. Consider using more specific terms for the best results. Print (or save as a pdf for digital use) the first two pages of each search engine's results for each term.

- Invite students to share their experiences with search engines (e.g., how often they use them, which ones they use the most, common problems they experience, how they've solved some of those problems, etc.).
- Next, have student read the <u>Not All Search Engines Are Alike</u> article.
- After reading, have students work in pairs or small groups to discuss the
 questions on the Search Engines Discussion Prompts page. Have a
 representative from each group summarize their discussion with the rest of
 the class.
- With students in their pairs/small groups, distribute copies (or have them
 electronically access) the five terms search engine results. Give each group
 time to review the results before facilitating a discussion. Use the Five Terms
 Discussion Prompts to guide the conversation.
- Extension: have students use



Search Engine Discussion Prompt Guide

- 1. What are some of the differences between the more popular search engines and specialized search engines like DuckDuckGo or Dogpile?
- 2. Explain how an algorithm the "brain" of a search engine.
- 3. Describe three ways a search engine evaluates webpages.
- 4. Give two reasons search engines may return different results for the same term.
- 5. How might the information you learned from this article change the way you search for information?
- 6. Why is it important to know how search engines work?

Adapted from Learning For Justice Understanding How Digital Information Comes To You

THE

CAREER

CENTER



- 1. What do you notice and wonder about the results returned from the three search engines?
- 2. How did the page titles differ across each search engine? Why do you think this is the case?
- 3. Did any of the search engines provide information without the user having to click on a link? Which one(s)?
- 4. In what ways is the descriptive information about the page titles presented across each search engine? What is most useful for you to see in order to help you decide if the webpage is a source you are looking for?
- 5. How are images of the term or phrase provided (if at all), and do you see this as an important aspect of a search result? Why or why not?
- 6. Which of the search engines also include ads? How useful (or not) do you find the ads and why?
- 7. What do you notice about the relevance of the headings as you move through the list of results?
- 8. Of the three search engines tested, which one do you think provided the best search results? What criteria are you using to classify them as the best?

Adapted from Learning For Justice Understanding How Digital Information Comes To You