

Teaching the Web – Instruction Discussion Group
December 2, 2004

How Information is Accessed on the Web

- **Search Engines** – Search their own database of web pages. Search engine databases are built by computer software programs called ‘spiders,’ which find new pages by searching the links of existing pages. When you perform a search in a search engine, you are searching their database of web pages, not the actual web itself. Popular search engines include:
 - **Google** – www.google.com - currently one of the most popular search engines and one of the largest, although it searches less than half of the searchable web.
 - **AskJeeves** – www.ask.com – allows natural language searches (e.g. What is the weather in Austin today?), very popular with K-12/undergraduate students.
- **Directories** – Organized according to major topics and subtopics. Directories are usually maintained by people who go through Web pages and choose Web sites to be included in the directory. Popular directories include:
 - **Yahoo** – www.yahoo.com – one of the most popular directories on the Web.
 - **Librarian’s Index to the Internet** – www.lii.org - pages chosen by librarians, every site reviewed by at least two people.
 - **Infomine** – <http://infomine.ucr.edu/> - Directory geared to faculty, staff and students looking for scholarly Internet resources.
- **Metasearch Engines** – Do not have their own databases. When you submit a search in a metasearch engine, they search multiple search engines and give you the combined results. Popular metasearch engines include:
 - **Dogpile** – www.dogpile.com - searches Google, Yahoo, Teoma, etc., although it does not distinguish sites included as advertisements.
- **Invisible Web** – Web pages that you cannot retrieve from searches in search engines. This includes dynamically generated web pages, such as online databases (e.g. library catalog entries) and pages that companies exclude on purpose. Some invisible web results appear in directories such as Infomine and the Librarian’s Index to the Internet.

Evaluating Information on the Web

1. **Author** – Can you determine the author of the information? Is the author recognized as an expert on this topic?
2. **Publisher/Host** – Who is the publisher or host of the information? What is the site’s domain, and what does that tell you about the publisher? Does the publisher’s bias affect the information?
3. **Currency** – Can you determine when this information was created or published? Do you need more current information for your topic?
4. **Content** – Is the information accurate? Is this an opinion piece?

Further Resources

- **Search Engine Watch:** This site is one of the best sites for keeping up with search engines. It is a commercial site, so emphasis is often on how to get your business ranked higher in search engines. <http://searchenginewatch.com/>

- **Sitelines** – a blog focused on web search tools authored by a librarian.
<http://www.workingfaster.com/sitelines>
- **Search Engine Colossus:** International directory of search engines by country.
<http://www.searchenginecolossus.com/>
- **Google Image Search:** Accessible from the Google home page. Searches images.

Sample Web Evaluation Assignments

There are numerous web research assignments that can be incorporated into your session. Here are a few examples.

1. Pre-select a few web sites that serve as both good and bad examples of the types of sites to use in a college-level paper. Ask students to work in groups to evaluate the sites and then present their findings to the class. (Hint: ensure all web sites are on the same topic)

Outcome: students learn to critically evaluate web sites

2. Divide the class into groups and have groups search for a topic in a search engine such as Google. Ask each group to choose a site, evaluate it and present their findings to the class.

(Hint: make sure they all search for the same topic).

Outcome: students learn to critically evaluate web sites

3. Display a web site and have students evaluate it in a class discussion.

Outcome: students learn to critically evaluate web sites

4. Have students search for a topic on the web, in a library database and in the library catalog. Ask them to look at the first page of results in each tool and discuss how the results from each differ.

Outcomes: students learn the difference between search tools and students learn the difference between the web and the library

5. Ask students to brainstorm numerous keywords for their topic. Have them search the web using three different combinations of keywords and compare the results of each search. Discuss results in class.

Outcomes: students learn to plan search strategies

6. Ask students to conduct the same search in a directory, a search engine and a metacrawler and explain the difference.

Alternative: Ask students to conduct the same search in two different search engines and explain the difference.

Outcome: students learn the difference between web search tools

Search Tips

These tips apply to Google, but most search engines offer similar advanced search features.

Search type	Example	Search Results
Phrase (in quotes)	“legalization of marijuana”	Searches for exact phrase, including articles and common words
Without the Words (-)	Marijuana -teens	Weeds out websites not relevant to your research
Domain (site:)	Marijuana site:.edu Marijuana site:norml.org Marijuana -site:norml.org	Searches in a particular website or website type; can also eliminate websites or types of websites
Allintitle (allintitle:)	allintitle:marijuana legalization	Searches for all the words only in the title of the page
Intitle (intitle:)	Intitle:marijuana legalization	Searches for the first word in the title and other words anywhere in the page
Link (link:)	Link:www.lib.utexas.edu	Find pages that link to a specific page
At least one of the words (or)	Marijuana or pot	Finds one word or the other
Related (related:)	Related:www.lib.utexas.edu	Finds web pages similar to the one you are looking at
Define (define:)	Define:serendipity	Gives you a definition of the word
Cache (cache:)	Cache:www.lib.utexas.edu	Displays what the page looked like the last time the search engine “spider” looked at the page (useful if the page has changed recently)

* Developed by LIILS staff, Fall 2004.