Beyond Web Search Tips and Tricks: Thinking through the Search

William H. Weare, Jr., Valparaiso University, Valparaiso, IN

Abstract

The author recommends a more intentional Web search strategy that will help students retrieve better search results. Teachers and librarians can help students to improve their searching skills by asking these four key questions: Is the open Web the right tool? What type of source is likely to contain the information I need? Where am I likely to find this information? What terms are likely to appear on the page I am looking for? The answers will help the student decide where the search will be conducted, what terms should be used to execute the search, and the particular tactic or strategy that will help retrieve the information most efficiently.

Keywords

Access to information, electronic information resource searching, information retrieval, information-seeking strategies, internet in education, internet searching, school libraries, web search engines, world wide web

Weare, W. H., Jr. (2010). Beyond web search tips and tricks: Thinking through the search. *Library Media Connection 28*(4), 56-57.

Not finding what you're looking for? Or, not finding it as quickly as you think you should? Join the club! Google and Yahoo are easy to use, but sometimes I just can't find what I am looking for. Like so many of the students I work with, I usually start a search without really thinking through the search process.

This article describes a more intentional Web search strategy designed to help students retrieve better search results. There are a series of questions students should be asking before beginning a search; the answers to these questions will shape the search process, aid in the more efficient discovery of on-topic sites, and facilitate the location of more authoritative sources. Following the model described here, librarians and teachers are encouraged to rethink their own approach to searching the Web, adopt this intentional strategy, and then, in turn, teach this approach to students.

THINKING THROUGH THE SEARCH

Librarians and teachers can encourage students to ask themselves four key questions to improve their searching skills:

- Is the open Web the right tool?

- What type of source is likely to contain the information I need?

- Where am I likely to find this information?

- What terms are likely to appear on the page I am looking for?

The answers will help the student decide where the search will be conducted, what terms should be used to execute the search, and the particular tactic or strategy that will help retrieve the information most efficiently. The discussion of each key question that follows includes many other suggested questions that students could ask as part of the search process.

Weare, W. H., Jr. (2010). Beyond web search tips and tricks: Thinking through the search. *Library Media Connection 28*(4), 56-57.

IS THE OPEN WEB THE RIGHT TOOL?

Many students—as well as many librarians and teachers—habitually begin a search for information with Google or Yahoo. It would be more productive to determine if the open Web is the best place to find the answer to the question.

If the open Web is the right place to look for the needed information, using one of the major search providers may not be the appropriate tool. Perhaps a Web search product other than a search engine, such as the BUBL LINK Catalogue of Internet Resources (http://bubl.ac.uk) or the dmoz Open Directory Project (www.dmoz.org) or another directory is a better place to begin. Using a subject-specific search tool may prove to be a more efficient approach: a search for the terms subject-specific search engines will return lists of these tools. Perhaps a proprietary database is the right place to look. For government information, www.usa.gov is the best place to begin. There are many ready reference sources available via the Web: dictionaries, thesauri, encyclopedias, almanacs, statistical sources, and directories.

If a search engine is the right place to start, which one should the student use? Google, Yahoo, Bing, and Ask are all good choices. Many students are able to locate what they are looking for with relative ease—most of the time. Librarians and teachers understand the frustration of the student who is looking for specific information and cannot find it. Sometimes there is something wrong with the approach to the search; perhaps the problem is the choice of source or tool; sometimes the information is simply not be available via the open Web. Whatever the case, take the time to ask if the open Web is the right tool; if not, suggest a more appropriate source or search tool.

WHAT TYPE OF SOURCE IS LIKELY TO CONTAIN THE INFORMATION I NEED?

In the previous section, the term tool was used to signify the method of access; this section addresses types of sources—many of which librarians think of as tools. Teaching the student to ask, "What type of source is likely to contain the information I need?" can improve the effectiveness of his

Weare, W. H., Jr. (2010). Beyond web search tips and tricks: Thinking through the search. *Library Media Connection 28*(4), 56-57.

search. Is the student looking for an almanac? An atlas? A biography? A government publication? A

newspaper account?

These questions may seem simplistic or obvious, but teaching students about the many types of

formats that house particular types of information will not only aid their search in the library, but also

their search online for the digital equivalent. Suppose the student is looking for a first-hand account of a

historical event. Could the student find that account in a newspaper? Does that newspaper have an

online archive? What about a back file of news magazines? Does the time period of the event fall within

the date range covered by proprietary databases to which the student has access? Perhaps this

particular information could be found in the collected papers of a prominent historical figure. Where are

his or her papers held? Is this material now part of a digital archive? Where else could the student find

primary materials? There are many such useful questions as well as many types of materials to consider

beyond books, newspapers, and journals. It may be a physical item held by the library or it could be

found online (Figure 1). Once they have determined what type of source would probably supply the

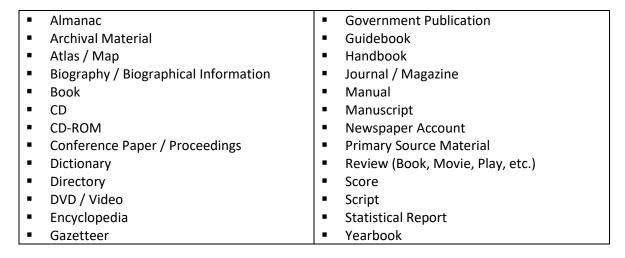needed information, the next consideration is where to find that source.

▪ Almanac	▪ Government Publication
▪ Archival Material	▪ Guidebook
▪ Atlas / Map	▪ Handbook
▪ Biography / Biographical Information	▪ Journal / Magazine
▪ Book	▪ Manual
▪ CD	▪ Manuscript
▪ CD-ROM	▪ Newspaper Account
▪ Conference Paper / Proceedings	▪ Primary Source Material
▪ Dictionary	▪ Review (Book, Movie, Play, etc.)
▪ Directory	▪ Score
▪ DVD / Video	▪ Script
▪ Encyclopedia	▪ Statistical Report
▪ Gazetteer	▪ Yearbook

Figure 1. What type of source is likely to contain the information I need?

Weare, W. H., Jr. (2010). Beyond web search tips and tricks: Thinking through the search. *Library Media
        Connection 28*(4), 56-57.

WHERE AM I LIKELY TO FIND THIS INFORMATION?

The question, "Where am I likely to find this information?" focuses on searching the Web. Rather than beginning a search with Google or Yahoo, the student tries first to determine what site is likely to have the needed information. By asking additional questions, the student can determine where on the Web the information is likely to be.

Suppose, for example, students need information about a current event, a social issue, or some other hot topic. This is a great opportunity to teach students about building upon what they already know. Can the students name a government agency that is associated with the topic? Is there an organization that addresses this particular issue? Many students are good at this brainstorming game. The librarian or teacher can name a topic and the students can then name a related agency or organization. Where would a student find information about the regulation of prescription drugs? The Food and Drug Administration website. How about airport security? At the Transportation Security Administration website. How about Lyme Disease? Centers for Disease Control and Prevention. Lung cancer? The American Cancer Society or the National Cancer Institute sites would both be good places to start. This is an opportunity to teach the student to go directly to the homepage of a particular agency or organization and use the search box found there rather than searching the open Web.

More advanced students may ask questions that work particularly well when students have already done some research on the topic and possess information that will lead to still more sources. Do I know the name of an authority in this field? Does this person have a website? To what organizations does this expert belong? If, for example, the student has located a key article on his topic, then the student may have found the name of an authority on that topic. Academics and other key players in a particular field are likely to belong to an organization of practitioners or professionals in their field. Experts on a particular topic may also have a personal website which would provide more information about the topic or list their publications. Again, students can build upon what they already know and go

Weare, W. H., Jr. (2010). Beyond web search tips and tricks: Thinking through the search. *Library Media Connection 28*(4), 56-57.

directly to the organization that serves members of the particular profession to look for information or look for that particular expert's website.

WHAT TERMS ARE LIKELY TO APPEAR ON THE PAGE I AM LOOKING FOR?

Despite the increasing use of the Web to locate images, audio, video, and maps, the Web remains text-based. Words matter—and they matter even more when searching the Web than when using traditional print sources to locate information. When using an index in a reference book, or when searching the library catalog or a proprietary database, students generally conduct the search using only terms that are related to the content. When searching the Web, ask your students to think about what other words are likely to appear on the page they want. These terms do not necessarily describe the subject matter; these terms may describe the type of content available on that page, or they may be links that describe content found on other pages. A search that includes a term or phrase such as *about* or *about us*, *directory*, *executive summary*, *fact sheet*, *FAQ*, *information*, *jobs*, *news* or *newsroom*, *press releases*, *product information*, *publications*, *Q&A*, or *white paper*—combined with one or more terms that describe the subject—are more likely to retrieve pages within a site that contains the specific information being sought (Figure 2).
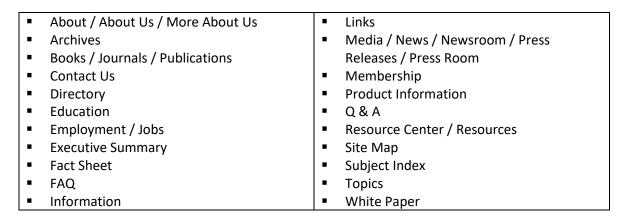
▪ About / About Us / More About Us	▪ Links
▪ Archives	▪ Media / News / Newsroom / Press
▪ Books / Journals / Publications	Releases / Press Room
▪ Contact Us	▪ Membership
▪ Directory	▪ Product Information
▪ Education	▪ Q & A
▪ Employment / Jobs	▪ Resource Center / Resources
▪ Executive Summary	▪ Site Map
▪ Fact Sheet	▪ Subject Index
▪ FAQ	▪ Topics
▪ Information	▪ White Paper

Figure 2. What terms are likely to appear on the page that describe the type of content that I am looking for?

Weare, W. H., Jr. (2010). Beyond web search tips and tricks: Thinking through the search. *Library Media Connection 28*(4), 56-57.

CONCLUSION

      School librarians and their teaching colleagues share a desire to help students find more authoritative, comprehensive, reliable, and current materials to support their assignments. There is an ongoing concern regarding the ability of students to adequately evaluate material found on the open Web. The intentional approach described here will not only help your students search the Web more efficiently and effectively, but will be particularly helpful in locating more authoritative sites. As students develop a better understanding of the search process by asking and answering the questions suggested here, they will be able to execute more intentional searches which will help them locate superior resources.

Weare, W. H., Jr. (2010). Beyond web search tips and tricks: Thinking through the search. *Library Media Connection 28*(4), 56-57.