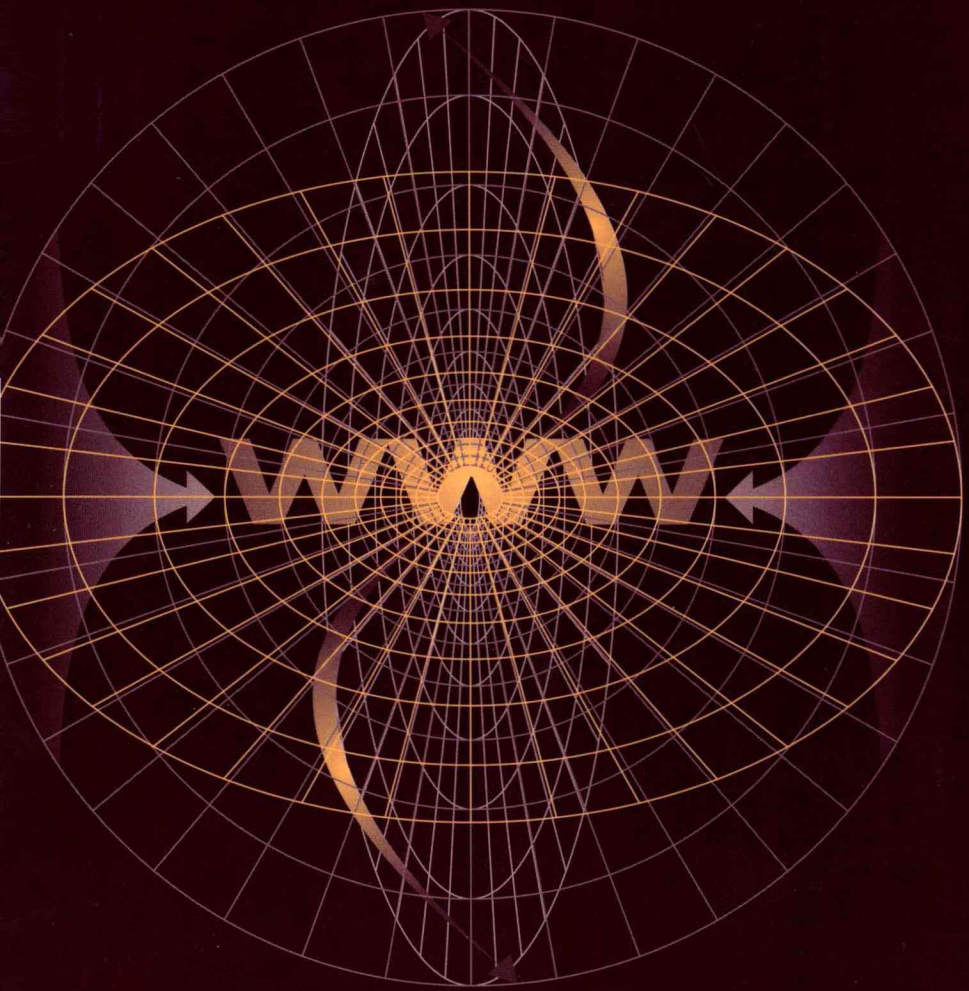
Mayfield's Quick View Guide to the Internet

FOR STUDENTS OF THE HUMANITIES



Jeffrey A. Hodges *Jennifer Campbell* *Michael Keene*

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The Internet addresses listed in the text were accurate at the time of publication. The inclusion of a Web site does not indicate an endorsement by the authors or Mayfield Publishing Company, and Mayfield does not guarantee the accuracy of the information presented at these sites.

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TIPS FOR NEW INTERNET USERS

- Shop around for Internet service providers. Chances are that if your college or university provides access, that will be the best deal you can get. Otherwise, check our list in Part One under "Internet Service Providers (ISPs)" before you sign a contract!
- Find the best time of day to connect to the Web. In many places, early in the morning or late at night is the best time to do most of your Internet work, especially if it involves downloading big files. You can work much faster by working a little smarter.
- To speed your download time, turn off the Auto Load Images option (from the Options menu) on your browser. Most of the time, you want to see the text first, and if there are also images you want to see, you can turn Auto Load Images back on and select Reload (from the View menu).
- When you find a page you like on the Internet, be sure to set a Bookmark so that you can come back to it later. (See the Quick View about using Netscape and other graphical browsers.)
- If you are doing research on the Web and find something important, print that page. It may not be there when you (or your teacher) want to come back to it, because pages sometimes are deleted or moved.
- Once you get on the Internet, you may want to change your start-up page to a page you choose—such as your favorite search engine's first page—rather than your Internet service provider's page. For more customization options, see your browser's preferences section (on the Options menu).
- Once you start downloading files from the Internet, it is easy to run out of space on your hard drive. Clean it up regularly, deleting old files and optimizing disk space.
- When you are sending e-mail, type addresses carefully. One mistake will make your mail undeliverable, and the Internet does not always let you know it wasn't delivered.
- If you want more information on an Internet topic, check for its Frequently Asked Questions (FAQ) list. Type the topic name and the letters FAQ into the text box of a search engine, such as Yahoo!
- Don't be afraid you will hurt the computer. You won't. The best way to learn how to do something on a computer is to explore, to play with it a little. Especially when it comes to the Internet, do not worry—you won't break it.

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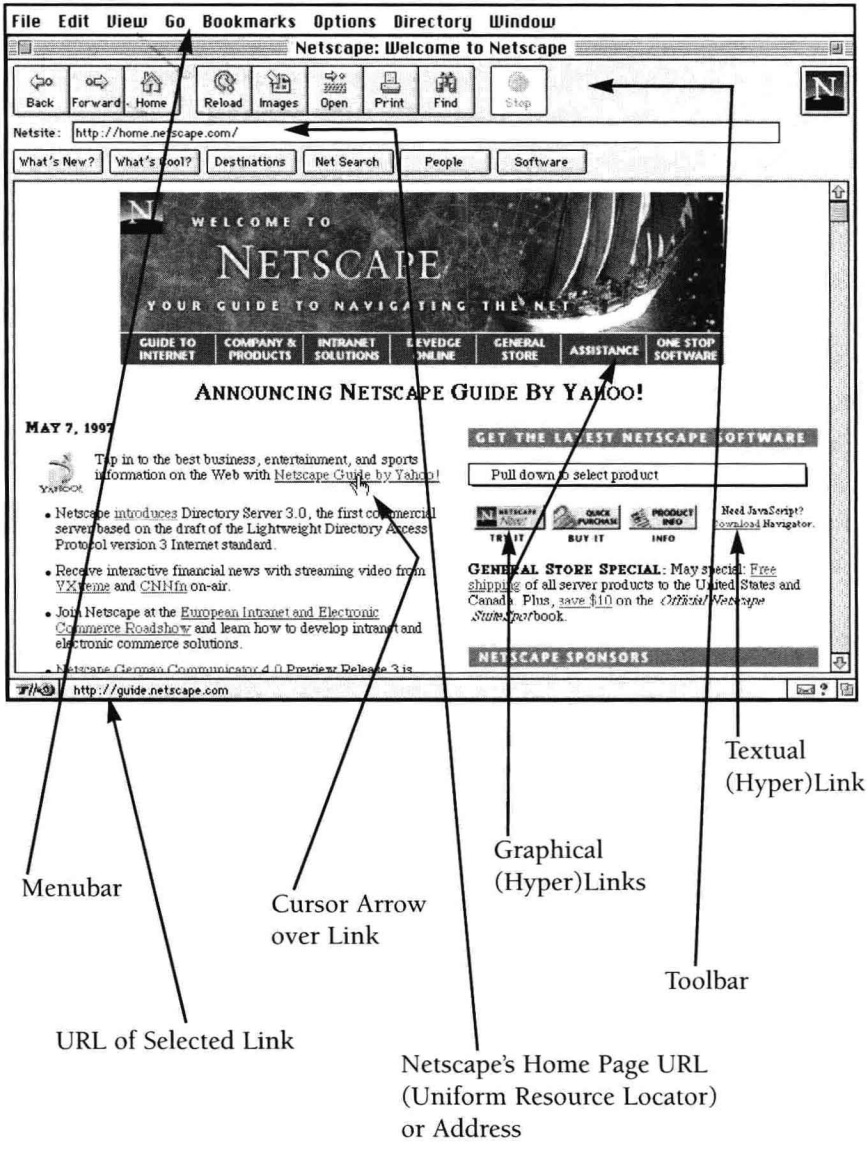
for Students of the Humanities

Jeffrey A. Hodges
Michigan State University

Jennifer Campbell
University of Tennessee, Knoxville

Michael Keene
University of Tennessee, Knoxville

Mayfield Publishing Company
Mountain View, California
London • Toronto



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INTRODUCTION

What Can the Internet Do for You?

*The **Internet** is a vast resource* not only for information, entertainment, and interaction with other people in other places who share your interests, but also for learning. You can do everything from reading newspapers and magazines to learning how to create your own **Web page**, to **videoconferencing**, to watching video clips from your favorite movies, to **downloading** free software for your computer, to taking a virtual tour of the National Gallery.

Beyond all those uses, *the Internet frees you from the physical boundaries of your campus, your city, your state, and your country.* Information from Japan or Germany or Australia can come to you just as fast and easily as information from across the hall. Because the Internet is always open, its information is more accessible than the information in your library. Even if your school's library is tiny, with access to the Internet, you have more information at your fingertips than the biggest library anywhere. All you need to do is learn how to find it. To help you find information on the Internet quickly and document it correctly is the purpose of this book.

In this guide you will learn how to find information on the Internet (Part One), how to use the Internet to communicate with other people and some precautions you should take (Part Two), and how to use the Internet to find a job or internship (Part Three). Part Four offers you a list of Internet Resources specifically designed to help you do research in the Humanities. As you use this guide you will be introduced to new terms and phrases. If you find yourself confused, re-read Part One and consult the glossary.

What Are the Internet and the World Wide Web?

*The Internet is a global **network** of computers.* It is composed of many parts, such as Web documents, **e-mail, Telnet,** file transfer, **Usenet (newsgroups)**, and **Gopher**. The Internet was user hostile until the **World Wide Web** came along. *The Web is a huge number of sites of information within the Internet.* Not only does the Web make accessing the Internet easier, but it also makes the Internet more fun because of the Web's **hypermedia** capabilities, such as audio, video, 3-D images, virtual reality, real-time communication, and animation. So let us help you get started!

QUICK VIEW
How Can I Use Graphical Access to the Internet?

Some students have access to computers that already have Netscape, Explorer, or some other graphical ***browser.*** *If that's your situation, this page will get you off to a fast start. The rest of this guide will provide more detailed directions.*

Using Netscape and Other Graphical Browsers

To access the Web's multimedia capabilities, you need a graphical browser, such as Netscape or Microsoft's Internet Explorer. (Note: You also need **TCP/IP** software; see page 4.) Netscape is used in the following description; other browsers, such as Explorer, work in essentially the same way.

Click on the Netscape icon to launch the program. The first Web page you see will depend on your **Internet service provider (ISP).** Most providers have designated a Web page to appear when you start Netscape. Many people like their first screen to be a **search engine,** such as Yahoo! <http://www.yahoo.com>. The Netscape Help button will show you how to change your start-up page.

There are several ways to access a Web page using Netscape. First, you can follow a **hyperlink**, which can be either text or an image. Textual hyperlinks, or **hypertext**, have a different look from the rest of the text. Depending on the browser you use, hypertext will either be a different color or it will be underlined, or both. To follow a **link,** use your mouse to drag the arrow over the hypertext. When positioned over a link, the arrow will turn into a hand. Click the mouse, and you will go to that Web page. (Some links on some pages are not marked, but whenever your cursor arrow turns into a hand, you can click there and be taken somewhere else.)

Another option to clicking a link is to type out a page's address (called the **uniform resource locator,** or **URL**). Click on the Open button on the toolbar, type the URL in the box provided, and press Return. To navigate through a sequence of pages you have already seen, use the Back and Forward buttons on the toolbar. You may also access a Web page you have already seen by choosing it from your list of **Bookmarks,** from entries on the History list (from the Window menu), or from the Go menu.

(Note: All URLs in this book are enclosed in angle brackets, < >, for readability. The brackets are not part of the address.)

QUICK VIEW
How Can I Use Text-Only Access to the Internet?

Some students have access to computers that will give them only text from the Internet. If your computer gives you access to Lynx or some other text-only browser, this page will help you get off to a fast start. The rest of this guide provides more detailed instructions.

Using Lynx and Other Text-Only Browsers

Lynx is the most popular text-only browser. With text-only browsers, you cannot view the multimedia functions on the Web, such as pictures, audio, or video. You see only text. (Note: You do not need TCP/IP software to use Lynx.)

If you have a computer account at school, find out if it is a **UNIX** or VMS account. Chances are it will be a UNIX account. (Lynx runs on both, but our example shows how it works on UNIX.) Next, find out whether Lynx is available; if so, you can access Lynx by logging on to your computer account and then on to Lynx. After logging on, you will see either a `$` or a `%`. Then type `lynx`. Your screen will look like this:

```
$ lynx
```

The first screen displayed should be a page containing information about the World Wide Web and giving you access to other pages.

To access a specific Web page, type `lynx` followed by the specific Web page's Internet address (its uniform resource locator, or URL). For example, if you wanted to go to Netscape's **home page**, your command line would look like this:

```
$ lynx http://www.home.netscape.com
```

When you view a Web page, the hypertext links (shortcuts to other pages) will appear in bold. To move your cursor to a link (in bold text), use your up and down arrow keys. When you place your cursor on the bold text, the text will become highlighted. To follow the link, press the right-arrow key. To go back, press the left-arrow key.

At the bottom of the screen, you will find a list of other commands. Simply type the first letter in the command name to execute that command. When you are finished, type `q` to quit. You will be asked if you really want to quit; type `y` for yes. This will bring you back to your system prompt (the `$` or the `%`).

(Note: All URLs in this book are enclosed in angle brackets, < >, for readability. The brackets are not part of the address.)

PART ONE
FINDING INFORMATION ON THE INTERNET

The **Internet** started in the 1960s as a project by the U.S. government to link supercomputers; eventually, its networking technology was used by academic institutions. In the beginning, the Internet was user hostile, and the numbers of computers and people it connected were limited. With the creation of the World Wide Web in the early 1990s by Tim Berners-Lee in Switzerland, the Internet became much more user friendly. Today, the Internet, a global network of computers, has a great many parts: the World Wide Web, Usenet, Gopher, Telnet, and **FTP** (file transfer protocol).

Technically, the World Wide Web is an Internet facility that uses hypertext to link multimedia sources. Web **servers** store files that can be viewed or downloaded with a Web browser via **HTTP** (hypertext transfer protocol). The most popular text-only browser is Lynx; some popular graphical browsers are Netscape, Explorer, and AOL (America Online).

How the Internet Works—In Brief

To find the information you want, you should know a little about how your computer works with the Internet. That is the subject of the next five sections. If you are not interested in learning more about how computers work, you can skip to the section "How to Find the Information You Want" on page 7.

Hardware and Software

To gain access to the Internet, you need a computer with the appropriate hardware and software and an Internet service provider (ISP). Some popular ISPs are AOL, CompuServe, and Netcom. To access the Internet from home, you need a computer with a **modem** to connect your computer to the phone lines. Most modems run at 28.8K **bps** (**bits** per second). Faster modems can save you money if you are charged by the amount of time you spend on the Web. You will need a computer that has at least 8 megabytes (MB) of **RAM** (random-access memory). (Note: You will also need to find out the networking capa-bilities of your ISP; information is transferred only as fast as your ISP's slowest connection.)

For software, you will need TCP/IP (transmission control protocol/Internet protocol, or languages that allow computers to communicate with each other)

to provide an interface between your computer and the Internet. If you have a Macintosh, you need MacTCP. If you have an IBM or clone, you need Winsock (which stands for "Windows socket"). Generally these networking **protocols** are already provided with your computer operating system. There are two main types of browsers: graphical and text-only, explained in more detail on pages 2 and 3.

Client/Server Systems

The Web works on a client/server system. The **client** is your computer and software; a server is any computer that houses files (text, audio, video, software) you want; and networks are systems that connect clients and servers. Think of your computer (the client) as a customer in a restaurant and the information provider (the server) as the chef. You order a meal (the information), and the waiter or waitress (the network) brings it back to you (your computer).

URLs and How They Work

To access a file by means of a Web browser, you must know its location. A URL (uniform resource locator), the Internet address for a file, is composed as follows:

```
protocol://server and domain name/file path/file
```

For example, suppose a student named Jane Smith at the University of Tennessee, Knoxville, has created a personal Web page for her résumé. The address for that page is as follows:

```
http://funnelweb.utcc.utk.edu/~jSmith/Resume.html
```

Here, `http` is the protocol; `funnelweb.utcc.utk.edu` is the server and **domain name;** `~jSmith` is the **file path;** and `Resume.html` is the file. When we type this address in Netscape or Lynx, the browser reads the URL's components to find the specific page. Our computer has to know what kind of protocol, or language, to speak in order to communicate with the server. The first part of the URL not only tells us what type of file we are accessing, but it also tells the computer what kind of language it needs to speak. In this case, we want a Web page in **HTML** (hypertext mark-up language), so the computer needs to speak hypertext, using HTTP (hypertext transfer protocol).

The next thing our computer needs to know is where the file is kept. This is what the second part of the URL, the server and domain name, tells us. The

server where the Web page in this example is kept is called `funnelweb`. The funnelweb server is a computer at the University of Tennessee, Knoxville (UTK) that is denoted by `utcc.utk.edu`. The `.edu` lets us know that the domain is "educational." Other types of domains are `.com` for "commercial"; `.mil` for "military"; `.org` for "organizational"; `.net` for "network"; and `.gov` for "governmental" sites. Seven new domain categories were added: `.firm` for "business"; `.store` for "retail"; `.nom` for "individual"; `.rec` for "recreational"; `.info` for "informational"; `.arts` for "cultural"; and `.web` for "Web oriented" sites.

Of all the Web pages at UTK, how does your computer know which one is Jane Smith's? The last two parts of the URL tell how to get to Jane Smith's file. (Note the tilde symbol [~], which lets us know that we are looking for a personal page. This is not unique to UTK, but standard for many personal pages.) The user identification for Jane's file path, or "user area," is `~jSmith`. The file we want is `Resume.html`. Now that our computer knows where to go, which file to get, and how to read it, the computer can display Jane Smith's page in Netscape. Notice that the file name has a mix of upper and lowercase letters. Most URLs are case sensitive, so be sure to enter the URL exactly, including the uppercase letters. Note also that URLs never contain spaces.

Downloading Information

When you access a page, it sometimes takes a long time for the page to appear on your screen. If you are using Netscape and look at the bottom of the browser window while waiting for a Web page to appear, you should see a percentage of the amount of data transferred. When you access a Web page, a copy of the file is transferred to your computer's memory. This is called downloading a file. So, when you are **surfing** the Web, copies of all those Web pages are downloaded to your computer. However, the file is not downloaded all at once; it is transferred in pieces, or **packets.** Depending on the size of the files you are downloading, the length of time it takes for the Web page to appear will vary: A large Web page or a Web page with lots of graphics will slow the transfer. Image files are larger than text files and take longer to download. To shorten the download time in Netscape, turn off Auto Load Images (from the Options menu). To remove the check mark, click on Auto Load Images. To turn Auto Load Images back on, simply click on that line and it will be reactivated. By turning off Images, Web pages containing graphics will download faster, but you will not see any of the graphics automatically. To see the graphics individually, you have to click on the picture frame, or to see all the graphics at once, turn Auto Load

Images back on and click on Reload (from the View menu) or on the Reload button on the toolbar.

Internet Service Providers (ISPs)

Before looking into commercial ISPs, check with your college or university's computing center because some schools offer Internet services for home access to students, faculty, and staff. Internet services through your school will probably be the best deal. Although they may not always have the latest upgrades of hardware or software, the price will probably be hard to beat.

If you decide to go with a commercial ISP, you should do some comparison shopping. Think about what you will be using your Internet connection for, such as e-mail, Internet mail, graphical access to the Web, file transfer, Telnet, or storing Web pages. Once you decide what you will need, find out which ISPs offer all those services. After you have gathered a list of possible providers, ask some questions:

- What is the level of customer support, such as online help, user manuals, and telephone support (preferably 24 hours)?
- Is there an installation fee?
- Is there an extra cost for e-mail? If so, is the charge by message, by time, or by size of the message? Is there a storage fee for mail?
- Are there different rates for access at different times of the day?
- Is there a local dial-in number? Will long-distance fees be charged?
- What is the **bandwidth** (size of the bandwidth can affect access speed)?
- Is all the necessary software provided, such as TCP/IP and a browser (such as Netscape or Explorer)?
- Is storage space available for Web pages? If so, what is the charge?
- Are back-up servers available to help maintain continuous access?
- What kind of security is offered?

How to Find the Information You Want

The Internet is a vast and rapidly changing conglomeration of information. Finding your way to the particular piece of information you need can be difficult if you are not familiar with the search options available.

World Wide Web Search Engines

You can search the Web with search engines such as Yahoo! or AltaVista; you can search FTP archives with **Archie** and **ArchiePlex;** you can burrow through **Gopher** with **Veronica, Archie**, **Jughead,** and Gopher Jewels; and you can access library computers directly with Hytelnet <http://www.cam.ac.uk/Hytelnet/>. Sometimes the problem is *not finding enough information;* more often the problem is *finding too much information;* and always the problem is *finding the right information.* Here are some suggestions for solving these problems.

Search engines are computer programs that allow you to find the information you want through key word searches. The search engine provides a text box, into which you type key words associated with the information you want. Most search engines also offer more complex searches involving some variation of **Boolean logic** with the aid of "logical operators," such as AND, OR, and NOT. (Some search engines use a variation of Boolean searching by letting "+" stand for AND and "-" stand for NOT.) Some even offer more advanced searching, such as limiting your search to specific dates or ranking key words in order of appearance within the document.

There are hundreds of search engines for the Internet—too many to discuss here. Two popular and different types of search engines, Yahoo! (a searchable, browsable directory) and AltaVista (a powerful search engine), are briefly described below. For a more extensive list of search engines, see Netscape's list at <http://home.netscape.com/home/internet-search.html>.

Yahoo! <http://www.yahoo.com> Yahoo! is both a search engine and a directory made of subject trees. A **subject tree** is a hierarchical index system for finding information. You begin with a general subject, such as Medicine, and follow the subject tree's branches to a specific document. Yahoo!'s subject trees begin on its main page, which can be found at its URL.

Yahoo! is a good way to start searching because it looks at only a few key elements. Consequently, Yahoo! is the place to go for general discussions of your topic. To learn more about how to do a search on Yahoo!, click on the Options link located by the text box where you type in your key terms.

AltaVista <http://www.altavista.digital.com> Unlike Yahoo!, AltaVista does a thorough full-text search of documents for the key terms. If you put a fairly general key term into AltaVista, you will most likely receive hundreds or even thousands of links to pages that may only mention your topic in passing.

AltaVista is a good place to search for obscure items or for very specific topics.

If you are getting too many **hits** for a topic on AltaVista, try doing the same search on Yahoo!; this should cut down the number of possible matches. Likewise, if you are searching on Yahoo! and you are not getting enough matches, try AltaVista.

AltaVista offers both a Simple Search and an Advanced Search. The Advanced Search helps you limit your results by specifying date ranges and ranking key terms. To find out more about Simple and Advanced Searches on AltaVista, click the Help button at the bottom of the first AltaVista page.

Searching via Key Words

Key word searches may require some imagination if you are not getting the results you hoped for. In most cases, your search was either too narrow or too broad. The tips below should help. Also, when you do find information you want, remember to check it for credibility. (See pages 12–15 on how to judge the reliability of Internet information.)

Narrowing a Search If you are getting too many hits (successful key word matches), try narrowing your search by adding more key terms. Sometimes this will help, because most search engines will look for each of the terms independently but display the pages with the most matches first. Usually, you can narrow your search and make sure that all the key terms appear in the document by using AND between the key terms.

Info Bit—Narrow your search by looking for the most current information (or for the most relevant dates) in the AltaVista Advanced Search by entering a starting and ending date for the information.

Info Bit—Some search engines, such as Yahoo!, allow you to search within document titles only. This will narrow your search results and may give you better sources on your topic.

Broadening a Search If you are not getting enough hits, you need to broaden your search by deleting some of the more specific key terms or substituting synonyms for the key words you already have listed. For example, for a search about how to make a Web page, you might try several search strings, such as "Web page design," "creating a Web page," and "making a Web page." Also, you may want to try a more general category under which your topic falls. For example, if you want information on the Hopi god Kokopeli, but