



## CHAPTER 2:

# NAVIGATING THE INTERNET

The Internet is a critical research tool for reporters and students. This chapter describes how researchers can use the Internet for finding a wide range of useful information—from browsers to newsgroups and from Uniform Resource Locators (URLs) to valuable online Web sites for reporters.

Rather than presenting all possible information on these topics, we provide some basic information and the best Web sites that cover these topics in depth, where you'll also often find links to additional sites of information.

Learning everything about these subjects would take you longer than four years of high school. Fortunately, you don't need to know everything—you really just need to know the basics to get started. Here are some things to know as you begin learning to use the Internet.

## The Basics

First, let's talk about the difference between the World Wide Web and the Internet. If you've ever visited New York City, you

know that when people talk about the city, they mean Manhattan Island. But as New Yorkers will quickly point out, New York City is made up of five boroughs—Manhattan, Queens, Brooklyn, the Bronx and Staten Island. Most people tend to use the words “the Internet (Net)” and the “World Wide Web (Web)” interchangeably, but they are not the same. The Web is just the dominant part of the Internet.

The Internet is a set of rules that allows computers to connect and communicate with other computers easily; it was developed by the U.S. Defense Advanced Research Projects Agency (DARPA) in 1969 as a way for researchers and defense contractors to exchange information. The World Wide Web was developed in 1990 by Tim Berners-Lee, who was a computer

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In most cases, when you look at your e-mail, technically you are doing it separately from the Web. When you talk in chat rooms, you can do that without accessing the Web. When you share files or music, that, too, can be done without the Web. All of these things can be done using the Web as well, which is why it may seem confusing. But it is important to understand the difference between the Web, a dominant part of the broader Internet, and the Internet itself.

programmer working for CERN, the European Organization for Nuclear Research. Berners-Lee constructed a graphic interface that allowed users to see photos and graphics, hear sounds and view videos by simply clicking on a hypertext link.

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## BROWSERS

You're probably familiar with Microsoft Internet Explorer, Netscape Navigator and AOL, and perhaps with Opera and Mozilla. There are dozens of other browsers available for "surfing" or exploring material available on the net, and new ones appear with regularity. But basically, you just need one main browser, as well as one or two more as backups, to be used when your main browser can't read a Web site or when it encounters a glitch. Information about specific browsers can be found at Yahoo's browser directory: [dir.yahoo.com/computers\\_and\\_internet/software/internet/world\\_wide\\_web/browsers](http://dir.yahoo.com/computers_and_internet/software/internet/world_wide_web/browsers).

Reviews, user ratings, and download links for more than 300 browsers also can be found at Download.com's browser directory [www.download.com/3150-2137-0-1-1.html?legacy=cnet](http://www.download.com/3150-2137-0-1-1.html?legacy=cnet).

## BROADBAND, DSL, CABLE MODEM, SATELLITE, ISDN, WIRELESS, DIAL-UP

These terms are banded about frequently and can be confusing. They all refer to how you reach the Internet. Broadband (high speed) options include:

- Cable modem
- Wireless broadband
- DSL (Digital Subscriber Line)
- Satellite
- ISDN (Integrated Services Digital Network).

Dial-up (using traditional telephone land lines) is a slower method. Not all options are available in every community, so you'll be limited to those available in your area. It is also entirely possible that students will have faster Internet access from home than they have from school and, as a result, may choose to do their online research from home.

Information about broadband connections to the Internet can be found at PC Magazine's Broadband site ([www.pcmag.com/broadband](http://www.pcmag.com/broadband)) and at PC World's Broadband section ([www.pcworld.com/resource/browse/0\\_cat,1322,sortIdx,1,00.asp](http://www.pcworld.com/resource/browse/0_cat,1322,sortIdx,1,00.asp)).

## DOMAIN NAMES

Domain names are more user-friendly alphabetic names used to point to Internet addresses. For example, <http://www.rtnfd.org> is the domain name of the Radio and Television News Directors Foundation.

The letters before www refer to the protocol or set of rules or standards used so that computers can exchange information. Common protocols include:

- http:// (hypertext transfer protocol)
- ftp:// (file transfer protocol)
- https:// (secure access protocol)
- telnet:// (terminal emulation protocol)
- gopher:// (document retrieval system)
- mailto:// (e-mail address link protocol)

The second section of a domain name is usually www (World Wide Web) followed by a dot (.), but there are variations, and this section is sometimes missing altogether.

The third section of a domain name typically names the organization or purpose of a Web site.

The last section of the domain name (known as the top level domain) refers to the type of organization that owns the domain. For example:

- .com—commercial or company sites
- .edu—educational sites
- .gov—U.S. government sites
- .mil—U.S. military sites
- .net—network or internet organization sites (like ISPs)
- .org—nonprofit organization sites.

New identifiers are periodically announced. Information about these can be found at the ICANN-Accredited Registrars' Web site ([www.icann.org/registrars/accredited-list.html](http://www.icann.org/registrars/accredited-list.html)).



The top-level domain also can refer to a country where the domain owner resides, such as .au for Australia and .jp for Japan. See IANA's (Internet Corporation for Assigned Names and Numbers') Root-Zone Whois Information ([www.iana.org/cctld/](http://www.iana.org/cctld/)

[cctld-whois.htm](http://www.iana.org/cctld/cctld-whois.htm)) for a list of the current country codes.

Understanding this much about domain names is important because it tells you something about the sites you're viewing. These conventions are not totally reliable, i.e., many individuals and organizations have registered ".com" domain names, but, as guidelines, they are useful for understanding most Web sites. And they can help you assess the credibility of a site. If, for example, you want to find the site for the U.S. Census Bureau, a government agency, you will find it at [www.census.gov](http://www.census.gov) and not at [www.census.com](http://www.census.com).

Because it's essential for reporters to evaluate the reliability of their sources of information, you'll need to know who created the Web pages you're viewing. If you type in the domain name at Better-Whois.com ([www.betterwhois.com](http://www.betterwhois.com)), this site will tell you which registrar set up the domain name. You can then follow a link to that registrar's site to enter the domain name again and find out who owns it. There are many other "whois" pages that can help you find out who owns a Web site, including [www.allwhois.com](http://www.allwhois.com) and [www.netsol.com](http://www.netsol.com) (then click on whois).

**Because it's essential for reporters to evaluate the reliability of their sources of information, you'll need to know who created the Web pages you're viewing.**

**Don't assume you will be able to find the exact page you were looking for again later on.**

Be aware, however, that some information about who owns a Web site may not be totally accurate.

### URLS

A Uniform or Universal Resource Locator (URL) is an Internet address that tells a browser where to find something on the Internet. A URL starts with a domain name, which may be followed by a directory name, a page name or by other identifiers used by a Web site designer to organize and identify the Web pages stored under a domain name.

When you read a Web page, it's important to put the information in context. It's possible that the point of view found there is just one of the choices listed within a menu of options on a higher-level page. To check this, you can delete the section of the URL after the last slash (/), view the higher-level page, and repeat this process section by section until you reach the domain name. For example, for the URL [www.odci.gov/cia/publications/factbook/docs/history.html](http://www.odci.gov/cia/publications/factbook/docs/history.html), you would delete "history.html" to go from a history page to the World Fact Book page on which it's contained. You could then delete everything after "publications/" to see a list of publications, and then continue to delete sections one by one until you reach the Central Intelligence Agency (CIA).

This process is also very handy when you reach a Web page that appears not to be working. It's not uncommon for Web site designers to reorganize their pages, and when you try to reach them in their old locations, you receive error messages. Higher-level pages may still be available, along with newer links to the page you

were trying to access. If you shorten the URL section by section, you may reach a page that is still working, and then find a newer link to the page you were trying to locate.

Another reason you may receive an error message when trying to reach a Web page is that it has been misspelled. It also could be that the address has a typo in it or you don't remember the correct address. Some of the common mistakes you can correct are:

1. Change htm to html or vice versa
2. Change the number 1 to the letter i or vice versa
3. Correct any obvious misspellings.

If none of these take you to the correct page, go to your favorite search engine and try to locate the page through a search.

### DOWNLOADING AND PRINTING

Because reporters need to track where their information has come from (either to attribute it properly or to find it again later), it's worth noting that nothing on the Internet is static; change is constant. It is essential that reporters download or print any information found on the Net before putting it into a story, along with any higher-level pages that will help to put it in context. Don't assume you will be able to find the exact page you were looking for again later on. Instead, save it, download it or print it. With most browsers, this is as easy as clicking on the print or save icon. Your copy may be the only copy in existence when you look for it again on the Internet at a later time.

## Tools Available

### SEARCH ENGINES

There are dozens of search engines available on the Internet, and there isn't a more essential online tool for any reporter. Some search engines are used to search for just about anything, while others are subject-specific. They don't all use the same commands, search the same Web sites, or return the same results. If you don't believe this, you need only run the same search on a few search engines to prove it to yourself. To better understand how search engines work, see Mamma.com's Search Engine Guide ([www.mamma.com/info/help/search\\_engine\\_guide.html](http://www.mamma.com/info/help/search_engine_guide.html)).

Fortunately, a reporter doesn't need to know all of the available search engines in order to search the Internet effectively. It is much more useful to become familiar with a few search engines, and to know where to find more if you need them.

The key is not to give up if you don't find the results you need using one search engine. There isn't a search engine available that actually searches the entire Internet. Until you've tried two or three, using their advanced options for searching, you really haven't even made a good-faith effort at finding information. And no matter how many search engines you use, you'll never be able to truly report that something does not exist on the Internet, because you just can't search it all. If you could, it would change a minute later anyway: the Internet is just that dynamic.

### GENERAL SEARCH ENGINES

Among the best of the general search engines are:

- Google [www.google.com](http://www.google.com)
- Yahoo [www.yahoo.com](http://www.yahoo.com)
- Teoma [www.teoma.com](http://www.teoma.com)

You can become familiar with each of these by clicking on every search option (including advanced). After that, be sure to read every selection on:

- About Google's Our Search ([www.google.com/about.html](http://www.google.com/about.html))
- Yahoo's Search Help ([help.yahoo.com/help/us/ysearch](http://help.yahoo.com/help/us/ysearch))
- Teoma's Advanced Search Tips ([sp.teoma.com/docs/teoma/about/advsearchtips.html](http://sp.teoma.com/docs/teoma/about/advsearchtips.html)).

The help pages on search engines give you all the tricks and tips you'll need to really make the search engine work better. For example, if you want to search for a specific person, you can use quotation marks at the start and end of the name to tell the search engine that the words must be next to each other. Each specific search engine has numerous options and capabilities, and learning them will take your searching to a much higher level. Good researchers always learn all the nuances of one or two of the search tools in order to be able to use them skillfully when they need them on deadline.

### SUBJECT-SPECIFIC SEARCH ENGINES

There are search engines that are suited to looking for specific types of information. These will usually do a better job of honing in on your search subject, omitting superfluous hits. An example of this is Nelson ([www.nelsonsearch.org](http://www.nelsonsearch.org)), which was created to search for news.



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**Each search engine handles your search in its own way. You need to know which commands are available for a search engine before searching.**

There are also search engines designed to be used by children, such as Ask Jeeves Kids ([www.ajkids.com](http://www.ajkids.com)).

To find more subject-specific search engines, try:

- Beaucoup! ([www.beaucoup.com](http://www.beaucoup.com))
- Search Engine Colossus ([www.searchenginecolossus.com](http://www.searchenginecolossus.com))
- Search.com's Specialty Searches ([www.search.com/sitemap](http://www.search.com/sitemap)).

### HOW TO SEARCH

Since you know how to locate search engines, searching might seem obvious. You just enter search terms and click on the search key, right? *Wrong*. Since each search engine handles your search in its own way, you need to know which commands are available for a search engine before searching, or the results will be overwhelming and not particularly relevant.

Editor Barbara Quint says that computers are like dogs—"friendly, but not very bright." Like dogs, computers obey specific commands, but they need the correct commands for your searches to be effective. Fortunately, we have such a set of commands, based on a system developed by a nineteenth-century Englishman named George Boole for formulating logical statements in algebra.

Boolean logic consists of three logical operators: AND, OR and NOT, which are essential for proper searching. If you search using the OR operator, you will normally get more results. For example, typing:

writer OR journalist

into Google will return Web sites that

contain the word "writer" as well as those that contain "journalist."

If you want to narrow your search, you can use the AND operator to ask for results that contain only Web pages that have both terms. Typing:

writer AND journalist

into Google will return Web sites that contain both "writer" and "journalist," but will not return pages that contain only one of these terms.

If you find that you still have too many results, you can narrow them further by removing those that are irrelevant, using the NOT operator. In the case of Google, NOT is represented by the minus (-) character. Typing:

writer - screenwriter

will return instances of Web pages containing the term "writer," but will exclude those that contain "screenwriter."

You can combine all three Boolean operators, adding additional terms until you've got a manageable set of relevant results.

An excellent primer on Boolean logic can be found at the University of Albany Library ([library.albany.edu/internet/boolean.html](http://library.albany.edu/internet/boolean.html)). If you understand Boolean logic, you can review the Help or Advanced screens of most search engines to find out how to enter the Boolean commands for that search engine.

Many search engines also offer additional search operators. Most allow you to enter an exact phrase to search for, rather than searching for each word individually (crucial

when searching for a person's name). There's truncation, which permits you to enter the first few characters of a word and get results containing other forms of the word (if you enter *read\**, the results would include *reads*, *reading*, *ready*, *readiness* and so on). A proximity operator tells the search engine that two words that you've entered must appear within a certain number of words from each other in your search results. Some search engines understand upper and lower case, which allows you to differentiate a cad from a CAD (computer assisted design), for example. You can sometimes search for words in particular fields, such as in the URL or title of the Web page. There can also be limit operators, such as those that limit results to those in a particular language, or a specified date range. See the Search Engine Showdown ([www.searchengineshowdown.com/features](http://www.searchengineshowdown.com/features)) to see how various search engines handle these features.

When looking at your search results, you should be aware that many search engines charge a fee to companies that want their names to appear at the top of your results. These are sometimes listed as "Sponsored Matches," "Sponsor Results" or a similar



notation, but may also be interspersed into the actual Web search results. Unless you're actually looking for a company selling something, you can skip the sponsored results.

You also may be able to sort your search results by date or

relevancy, which can be very helpful. But be aware that dates are vague—they may be the date the page was created or the date something was posted.

To learn more about search engines and stay current on new developments in searching, go to SearchEngineWatch ([searchenginewatch.com/links/index.php](http://searchenginewatch.com/links/index.php)) and to Search Engine News ([www.searchengineshowdown.com](http://www.searchengineshowdown.com)).

## SUBJECT DIRECTORIES, GUIDES AND BLOGS

No matter how obscure your research topic, there is probably someone on the Internet who has already scoured the Web and compiled a list of valuable sites for that subject. These usually take the form of subject directories, such as the lists of links Yahoo! ([www.yahoo.com](http://www.yahoo.com)) became famous for. These compilations can be full-fledged

## Teaching Idea: Scavenger Hunt

For practice searching the Internet, have students join in an online scavenger hunt. See About's Computer & Internet Scavenger Hunts at [websearch.about.com/od/scavengerhunts](http://websearch.about.com/od/scavengerhunts) for ideas and information.

guides to a topic, complete with links, original content and online experts, such as those found at About ([www.about.com](http://www.about.com)). They can also take the form of blogs, which are Web logs where the author records thoughts, events, news, links and even daily minutiae on any topic that interests him or her, such as those indexed by Globe of Blogs ([www.globeofblogs.com](http://www.globeofblogs.com)).

The following are some directories designed specifically for journalists.

### LISTS OF LINKS



- NSPA/ACP Student Media Sourcebook ([studentpress.journ.umn.edu/sourcebook/index.html](http://studentpress.journ.umn.edu/sourcebook/index.html))
- Power Reporting Resources for Journalists ([powerreporting.com](http://powerreporting.com))
- A Journalist's Guide to the Internet ([reporter.umd.edu](http://reporter.umd.edu))
- The Journalists Toolbox ([journaliststoolbox.com](http://journaliststoolbox.com))
- JournalistExpress ([www.journalistexpress.com](http://www.journalistexpress.com))
- Yahoo's Journalism Directory ([dir.yahoo.com/news\\_and\\_media/journalism](http://dir.yahoo.com/news_and_media/journalism))
- Reporter's Desktop ([www.reporter.org/desktop](http://www.reporter.org/desktop))

### GUIDES

- JournalismNet: The Investigative Guide to Internet Research ([www.journalismnet.com](http://www.journalismnet.com))
- American Press Institute's High School Journalism Guide ([www.americanpressinstitute.org/content/3930.cfm](http://www.americanpressinstitute.org/content/3930.cfm))
- Journalism Careers.com Journalism Links ([www.journalismcareers.com/journalismlinks.shtml](http://www.journalismcareers.com/journalismlinks.shtml))

### BLOGS

- The Media Drop ([www.themediadrop.com](http://www.themediadrop.com))
- Just Sites ([justsites.blogspot.com](http://justsites.blogspot.com))
- CyberJournalist.net J-Blogs (Professional Journalists' Web logs; [www.cyberjournalist.net/cyberjournalists.php](http://www.cyberjournalist.net/cyberjournalists.php))

There are similar directories for nearly anything that you could research. One of the great benefits of directories is that people who know nothing about a topic can use a directory to gain a wealth of information in one place, even if they lack the terminology needed to use search engines to find and compile it on their own.

A directory usually has some sort of logic or organization, making it clear how broad the subject is and highlighting what is important about it. Authors of directories typically have expertise or at least great interest in the subject, which can shorten your learning curve tremendously for an unfamiliar subject. All of this makes directories an ideal starting place for a student journalist.

### META-SEARCH ENGINES

Meta-search engines not only save time by performing searches on several search engines at once, they combine the results, which helps to eliminate redundancy in your search efforts. However, they rarely offer the advanced search capabilities of using the search engines themselves. So while you get a lighter, broader search of several search engines, you lose depth and the capability to refine and maneuver the search. Sometimes it's a worthwhile tradeoff; other times it's not. Also, be aware that a considerable

portion of the results may come from paid or sponsored ads and you may not know which results are paid and which are not.

If you'd like the convenience of searching several search engines and directories at once, there are many meta-search engines:

- Dogpile ([www.dogpile.com](http://www.dogpile.com)), which searches:
  - About
  - Ask Jeeves
  - FindWhat
  - Google
  - Looksmart
  - Overture
  - Teoma
  - Yahoo
- Mamma ([www.mamma.com](http://www.mamma.com)), which searches:
  - About
  - Business.com
  - Entireweb
  - Gigablast
  - Google
  - Looksmart
  - Mamma's Collection
  - MSN
  - Open Directory
  - Teoma

and can be customized to search for pay-per-click (sponsored) matches.

- Search.com ([www.search.com](http://www.search.com)), which searches:
  - Google
  - LookSmart
  - MSN
  - MySimon
  - Open Directory
  - Thunderstone
  - Wisenet
  - Yahoo

and can be customized to search for sponsored links (ads) or headlines.

### AUTOMATED SEARCH TOOLS

Search engines and directories are essential tools for online research, but for a reporter who covers a beat, automated search tools are just as important. To anyone who is interested in continually tracking information about a particular subject, an automated search tool is like having your own assistant scouring the Internet for you and showing you what's new on the topic.

### SEARCH AGENTS, SEARCH BOTS AND ALERTS

Alerting tools (sometimes called search agents or search bots) are used to repeat a specified search, continually sending results to you. Most alerting tools send only a headline and link to the full article, so that you can click on those that interest you, bringing you back to their site.

A good example of a news alerting tool is ZDNet News E-mail Alerts ([zdnet.com.com/html/z/alerts.html?tag=zdnn.alerts](http://zdnet.com.com/html/z/alerts.html?tag=zdnn.alerts)), which will search ZDNet's news sources using the keyword(s), company or topic that you specify, and send e-mail notices to you as new articles that match are found. Job searchers can find similar services available through many job sites, where they enter their ideal job criteria and periodically receive new job listings through their e-mail. Additional examples of search agents and bots available for tracking various types of information can be found at the BotSpot ([www.botspot.com/BOTSPOT/Windows/Search\\_Bots](http://www.botspot.com/BOTSPOT/Windows/Search_Bots)).

## Newsgroups

are a great source for finding terminology.

Reporter Bill Dedman's site, Power Reporting, [www.powerreporting.com](http://www.powerreporting.com), has an outstanding collection of alerts focused on beats for journalists that can be very helpful if you follow specific subjects.

### NEWSREADERS, NEWS AGGREGATORS, RSS AND ATOM FEED READERS

By any of these names, an RSS (Rich Site Summary or Really Simple Syndication) is a tool that scours the news sites, Web sites and blogs that you specify and brings the news that you want back to you in the form of a Web page. It's like TiVo for the Web, customizing searches for you.

The Christian Science Monitor has provided a well-written primer on RSS, including links to available newsreaders ([www.csmonitor.com/rss/#about](http://www.csmonitor.com/rss/#about)).

Another outstanding tutorial on learning about RSS can be found at the legal site LLRX [www.llrx.com/features/rssforlibrarians.htm](http://www.llrx.com/features/rssforlibrarians.htm)

In most cases, to use an RSS, you'll subscribe to channels that contain the types of information that you like to read. Some newsreaders go a step further in allowing you to set up keywords that it will use to search for particular articles. This is a real time-saver for a busy reporter.

To see the channels available, you can go to:

- NewsIsFree ([www.newsisfree.com/sources/browse](http://www.newsisfree.com/sources/browse))
- Moreover Technologies ([www.moreover.com/cgi-local/page?o=portal](http://www.moreover.com/cgi-local/page?o=portal))
- Free RSS Feeds ([pages.alexandria.com/prod\\_serv/rss\\_feeds.html](http://pages.alexandria.com/prod_serv/rss_feeds.html)).

### NEWSGROUPS, DISCUSSION FORUMS, BULLETIN BOARDS

There are several names for newsgroups, including Usenet (User's Network) newsgroups, discussion forums and bulletin boards. By whatever name, newsgroups are a place where participants post information online and read what was posted by others. They are typically available to anyone who happens to read them or wants to contribute to them, just like a public bulletin board you might see at a supermarket.

Newsgroups are a great source for finding terminology. If a student were researching a story about the dangers of inhaling aerosols, searching the newsgroups would result in terms like "huffing" and "huffer." Using those terms to search the Web would lead to additional information. Knowing the right terminology is also absolutely essential for interviewing; it lets your subjects know that you've done your homework, and may even convince them that you live in "their world."

Newsgroups can be handy for taking the pulse of what people are thinking, like eavesdropping on strangers. Around election times, newsgroups provide a great way to hear what a candidate's supporters are saying, as well as finding out about possible criticisms. It doesn't mean that newsgroup members on either side of an issue have all of the facts or should be quoted in an article. It just gives a reporter some ideas to research for an article. It is often a great way to spot trend stories, if "everyone" is talking about a specific topic.

Under certain circumstances, newsgroup information can be considered valuable information if you can validate it elsewhere; however, newsgroups are not a good

source for quotable facts, as anyone can write anything on a newsgroup.

To participate in a newsgroup, you may need a newsreader program. Browsers such as Netscape Navigator and Internet Explorer come with newsgroup readers, as do many e-mail programs. Other newsreaders also can be downloaded.

In addition, there are Web-based newsgroups that can be read by anyone who can access Web sites, such as those at Google Groups ([groups.google.com](http://groups.google.com)). For these you don't need a newsgroup reader. This also applies to most bulletin boards found on company or organization Web sites.

Newsgroups are usually based around a similar interest or subject. There are almost a trillion postings, with more than 35,000 categories and more than 50,000 newsgroups on the Internet. Usenet subjects are grouped into the following broader classifications:

- alt alternative (anything can end up here; these are not controlled by Usenet)
- comp computers
- misc miscellaneous
- news newsgroups
- rec recreation, arts, hobbies
- sci science
- soc social issues
- talk debate

These classifications may be further subdivided into groups, subgroups and topics.

To use Google Groups' newsgroups, see their help page ([groups.google.com/googlegroups/help.html](http://groups.google.com/googlegroups/help.html)).

[googlegroups/help.html](http://groups.google.com/googlegroups/help.html)).

To use Yahoo Groups, see their help page ([help.yahoo.com/help/groups](http://help.yahoo.com/help/groups)).

To use a bulletin board found on another Web site, look for directions on that Web site.



**TIP: To learn how to use newsgroups, you should research a subject you care about: a hobby, a music group you listen to, or a subject about which you are passionate.**

Some newsgroups are specifically designed for high school journalists, such as:

- High School and College Journalism ([groups.yahoo.com/group/HS-CollegeJournalism](http://groups.yahoo.com/group/HS-CollegeJournalism))
- High School Journalism ([groups.yahoo.com/group/hsjournalism](http://groups.yahoo.com/group/hsjournalism))
- Scholastic Journalism ([groups.yahoo.com/group/journalism](http://groups.yahoo.com/group/journalism))
- Teen Journalism ([groups.yahoo.com/group/teenjournalism](http://groups.yahoo.com/group/teenjournalism))
- Google Group [alt.journalism.students](http://alt.journalism.students)
- Google Group [alt.radio.highschool](http://alt.radio.highschool)
- National Scholastic Press Association Forums ([www.studentpress.org/nsipa/forums/index.html](http://www.studentpress.org/nsipa/forums/index.html))

There are also newsgroups specifically for high school journalism teachers, such as:

- Public Journalism Education ([groups.yahoo.com/group/publicjournalismeducators](http://groups.yahoo.com/group/publicjournalismeducators))
- Teaching Journalism ([groups.yahoo.com/group/teachingjournalism](http://groups.yahoo.com/group/teachingjournalism))

- National Scholastic Press Association Forums—Look for specific topics ([www.studentpress.org/nspa/forums/index.html](http://www.studentpress.org/nspa/forums/index.html))

**Mailing lists typically take the form of an e-mail discussion among several people.**

Finally, there are similar newsgroups for thousands upon thousands of subjects, which can be helpful for most research topics.

### MAILING LISTS

A mailing list (also known as a LISTSERV) is much like a newsgroup, except that members must subscribe to the list and be accepted before participating, and the messages posted are sent to all members' e-mail. This can be confusing, as some newsgroups also require membership, and it is also possible for newsgroup messages to be sent to member e-mails. Whether something is a newsgroup or a mailing list is really splitting hairs. The only difference worth noting is that mailing lists are slightly more private than newsgroups, as the messages in mailing lists are not typically

available or searchable on the Internet. As the messages are sent to all members of the mailing list, individual members still have no control over where their messages may end up.

For this reason, students should be reminded that, while mailing lists may be good sources for story ideas, they should not rely on the lists as sources of factual information. It often becomes difficult to sort out who is posting the information.

Mailing lists typically take the form of an e-mail discussion among several people. They may also take the form of a newsletter, with information going to the members, but with member messages not appearing or being forwarded to the other members. Mailing lists may be moderated, meaning that someone reads all messages before sending them on to the group, editing any that they believe to be offensive or in violation of the mailing list's rules. They may alternatively be unmoderated,

## Teaching Idea: Using Google Groups

For practice using newsgroups, have each student select a subject he or she cares passionately about, or choose one the class agrees on and search it using Google Groups ([groups.google.com](http://groups.google.com)). This will get students familiar with subject searching in newsgroups, which will be useful when they want to use it on an assignment.

### Did you know?

Students who use newsgroups should be aware that it is possible to search for messages posted by an individual, so post information carefully and refrain from writing anything that might offend anyone. Not only could it get back to an individual you're writing about (such as students, teachers or the principal of your school), but future employers could use your e-mail address to search for any messages that you've posted, and use them to decide if you're the kind of employee they want to hire. One suggestion is to create an e-mail address specifically for this posting so it can be monitored and discarded. Be especially careful not to publicly post personal information.

meaning that messages sent to the mailing list are automatically forwarded to everyone.

A mailing list manager is a type of software that, based on commands received, automates certain tasks, such as adding and deleting members for a mailing list. Several types of mailing list managers exist, including:

- **LISTSERV**, which was started at universities for IBM mainframe computers; *listserv* is usually the first word in the subscription addresses of these lists.
- **ListProc** (short for Listprocessor), which is used by UNIX systems; *listproc* is sometimes the first word in these subscription addresses.
- **Majordomo**, which is a newer UNIX-based mailing list manager; *majordomo* is the first word in these subscription addresses.

There are also mailing lists in which you send your requests to actual live people. These often have *request* in the subscription e-mail address.

In subscribing to a mailing list, you should remember that you are probably communicating with a piece of software, so you'll need to follow the necessary directions exactly, or your request will be rejected or ignored. To subscribe, send an e-mail to the e-mail subscription address, and include in the subject line: **subscribe** *<listname>*.

After you subscribe, you should receive back a message with more instructions for



participation. Rather than receiving each message posted on the list individually, you may wish to receive a digest of all messages posted in the last day or two; there is a digest command for this. Other commands will allow you to receive a

list of subscribers, postpone the mail when you're on vacation, or remove yourself from the list. The commands for each of these will vary depending upon whether the list is managed by a LISTSERV, ListProc, Majordomo or other list manager, so check the instructions that you receive.

There are lists of interest to high school journalists, such as:

- **Independent Campus Journalism**  
List name: imr-l  
E-mail address: listproc@hawaii.edu  
Further information:  
[www.tile.net/lists/index.php?list\\_id=1761](http://www.tile.net/lists/index.php?list_id=1761)
- **Exploring Journalism Careers Forum**  
List name: EXPLOREJOUR-L  
E-mail address:  
listproc@lists.missouri.edu  
Further information:  
[www.tile.net/lists/index.php?list\\_id=3270](http://www.tile.net/lists/index.php?list_id=3270)
- **Journalism School Info**  
List name: sjmc-list  
E-mail address:  
listproc@lists.colorado.edu  
Further information:  
[www.tile.net/lists/index.php?list\\_id=45530](http://www.tile.net/lists/index.php?list_id=45530)

There are also mailing lists for high school journalism teachers, such as:

**A mailing list manager is a type of software that, based on commands received, automates certain tasks, such as adding and deleting members for a mailing list.**

- High School Journalism Project Leaders  
List name: HS\_JOURNALISM  
E-mail address:  
[LISTSERV@LISTSERV.KNIGHTFDN.ORG](mailto:LISTSERV@LISTSERV.KNIGHTFDN.ORG)  
Further information:  
[www.lsoft.com/scripts/wl.exe?SL1=HS\\_JOURNALISM&H=LISTSERV.KNIGHTFDN.ORG](http://www.lsoft.com/scripts/wl.exe?SL1=HS_JOURNALISM&H=LISTSERV.KNIGHTFDN.ORG)
- Discussion List for Journalism Education  
List name: JOURNET  
E-mail address:  
[LISTSERV@LISTSERV.CMICH.EDU](mailto:LISTSERV@LISTSERV.CMICH.EDU)  
Further information:  
[www.lsoft.com/scripts/wl.exe?SL1=JOURNET&H=LISTSERV.CMICH.EDU](http://www.lsoft.com/scripts/wl.exe?SL1=JOURNET&H=LISTSERV.CMICH.EDU)
- Faculty in Journalism  
List name: JOURNALISM  
E-mail address:  
[LISTSERV@LISTSERV.CCCNEXT.NET](mailto:LISTSERV@LISTSERV.CCCNEXT.NET)  
Further information:  
[www.lsoft.com/scripts/wl.exe?SL1=JOURNALISM&H=LISTSERV.CCCNEXT.NET](http://www.lsoft.com/scripts/wl.exe?SL1=JOURNALISM&H=LISTSERV.CCCNEXT.NET)
- Journalism Faculty and Staff  
List name: sjmc  
E-mail address:  
[listproc@lists.colorado.edu](mailto:listproc@lists.colorado.edu)  
Further information:  
[www.tile.net/lists/index.php?list\\_id=8844](http://www.tile.net/lists/index.php?list_id=8844)
- Teaching Journalism Ethics Discussion List  
List name: teachethics-l  
E-mail address: [listproc@hawaii.edu](mailto:listproc@hawaii.edu)

Further information:

[www.tile.net/lists/index.php?list\\_id=43602](http://www.tile.net/lists/index.php?list_id=43602)

To find additional mailing lists to subscribe to, you can search:

- Topica, the largest collection of web-based mailing lists ([www.topica.com](http://www.topica.com))
- Catalist: the official catalog of LISERSERV lists ([www.lsoft.com/lists/listref.html](http://www.lsoft.com/lists/listref.html))
- Tile.net: the Comprehensive Internet Reference ([www.tile.net](http://www.tile.net))

### E-MAIL

Most people are familiar with e-mail, but for journalists e-mail can be an incredibly useful tool. With the help of the Internet, a journalist can gather contact names and e-mail addresses for key individuals at company and organization Web sites. A well-written e-mail to these individuals can solicit help where a phone call from a teen might have failed. Interviews can be arranged or even completed over e-mail. This can be especially useful where there are time zone differences or great distances between the writer and the interview subject.

E-mail can come in handy when it is used to supplement a reporter's notes. Some

## Teaching Idea: Create a Mailing List

For practice using mailing lists, create one for your class and, at the same time, you might also try to get the parents of the students on board. It can be a useful tool for notifying people about daily assignments or information that students are supposed to pass on to their parents. Show the students how to subscribe, search and get off the mailing list. One note of caution: It is easy to become overwhelmed with messages when you enthusiastically subscribe to a number of mailing lists at one time. It is usually best to subscribe to one list at a time and spend a few days reviewing the messages to determine whether the mailing list is really of interest. As noted earlier, it can also be helpful to request the digest edition of the mailing list, which is a daily e-mail with a compilation of all of the messages sent that day, rather than receive each e-mail individually.

journalists use free services such as Eudora, which enables them to download e-mail directly to their computers. They store the e-mail there for as long as they need to, and can read and review the e-mail when they are writing their stories. Storage on your computer (or even on a CD for long-term storage) enables you to have control of the files—something you would of course do with your reporter’s notes.

E-mail often is used as the delivery medium for today’s news, and writers can receive more immediate reader feedback on their articles from e-mail than they did in the past. E-mail also can be the source of story ideas for future articles.

In this way, e-mail has made the process of publishing a student newspaper much more interactive, opening communication between readers and news staff.

**TIP: Remind students to make sure that the person they are planning to quote is actually the person from whom they have received the e-mail. A quick phone call is often a useful follow-up.**

## CHAT OR INSTANT MESSAGING

Student journalists can take advantage of chat as an interview tool, much like e-mail. For example, they could join Teens 13-25 ([www.icq.com/groups/group\\_details.php?gid=21520](http://www.icq.com/groups/group_details.php?gid=21520)) and start a topic asking other teens for anything from opinions about a new band to fears about violence on campus. (Any message received would have to be attributed to chat group members, since you never really know who is participating.)

Whether you use IM (Instant Messenger),

Trillian, IRC (Internet Relay Chat), AIM (America Online’s Instant Messenger), ICQ (“I seek you”) or any of the endless variety of other chat tools, these technologies can be especially handy when conducting a brainstorming session with a group, such as a journalism class or your news staff. If the chat session is logged or saved, the participants will have an accurate transcript of everything that was “said,” which might not be possible if the same group of participants had met in person. If writing a subsequent article, such a transcript would be very valuable.

Students and teachers should be aware that chat is not a secure communication medium, and it is possible for others to spy on your conversations or to misrepresent themselves.

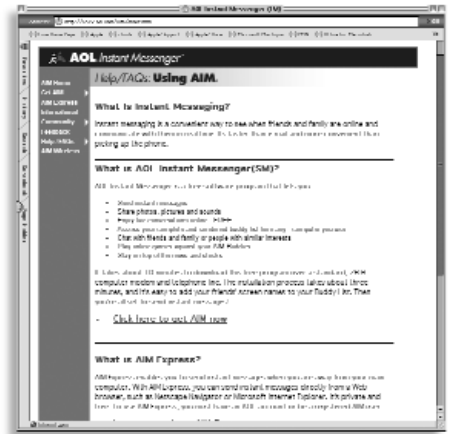
There are many ICQ interest groups about journalism, such as those found under the journalism heading or by searching for journalism at ICQ ([www.icq.com](http://www.icq.com)). Similar groups could be found for nearly any topic of interest.

For further information about Instant Messaging, see:

- Instant Messaging Planet.com ([www.instantmessagingplanet.com](http://www.instantmessagingplanet.com))
- BigBlueBall.com ([www.bigblueball.com](http://www.bigblueball.com))
- Chat.net ([www.chat.net](http://www.chat.net)).

## BOOKMARKS, FAVORITES, HOT LIST, LINKS

Every newsroom should have a list of valuable Web sites that are shared among the reporters, and bequeathed from one year’s staff to the next as a legacy. Whether



**Chat tools can be especially handy when conducting a brainstorming session.**

maintained on a central PC, or on your news Web site, these tried-and-true links should be organized and categorized, as they represent the most useful places to start your online research.

Some thought should go into how these links will be maintained by the staff over time so that they don't become stale and lose their usefulness.

See Appendix B for journalism resources geared to students and teachers.

### FRAMING YOUR RESEARCH

Now that you're familiar with Internet basics and so many online tools, you may wonder where you should begin when starting your research for an article. Following is a short step-by-step guide that should help you plan your online research more strategically:

1. If you have no knowledge of the subject, put any phrases that identify what you're researching into a search engine or perform a newsgroup search for the same. Skim through a few of the results to gather the terminology needed to do a better search.
2. When you have sufficient terminology, use directories to become better versed in the subject.
3. When you're rather well versed in the subject, locate associations, organizations or groups that are involved in the subject, if possible. They can usually be relied on for volumes of accurate information, which often can include free publications, along with contacts that can be interviewed. If you don't find all

of this on their Web site, you probably will find contact information where you can e-mail a specific request.

4. When you're very knowledgeable about the subject (and not before), locate key companies and, within those companies, the movers and shakers of the industry. If you're researching a political topic, follow the guidelines above, but instead of a company, locate key people on each side of the issue. If you can get an interview with one or more of them, you'll not only learn about the current status of the industry or issue, but where they're leading it and what can be expected for the future.
5. Search other sources that may or may not be found through your Internet search: news outlets, periodicals, books and other tried-and-true research tools.

It's very easy to become sidetracked on the Web, and take your research in too many directions at once. If you follow a research plan, such as the one above, you stand a much greater chance at staying on track and concluding with a truly newsworthy article.

A few suggested story ideas:

- Look at incidents of violence at your school, in your school district and at the state and federal level. Do a comparison. Find some experts who can comment about the subject.
- Do the same thing with a health issue.
- Research a trend you may notice at your school and see if others have written about it.
- Look at test scores at your school and find comparable schools or school districts to make a comparison. ■