

# 2

## CHAPTER

# The Second Week

## Developing a Research Strategy

A few years ago, I wanted a pair of good birding binoculars for my birthday. I thought of the local store that seemed to carry the largest selection of binoculars and went there; within 20 minutes or so I had spent about \$300 on some Swift binoculars, a brand that is highly regarded by wildlife watchers. Did you ever notice that is often *after* your purchase when you're most motivated to seek out information that reinforces your decision to buy something? Within days of buying the Swifts, I searched the Internet just to make certain that the model I bought was the one recommended by most birders. Sure enough, that seemed to be the case. Then I casually checked the prices on the binoculars, quite certain that I made a fairly good deal on them. To my horror I discovered that I had paid about \$100 more than I had to.

Sometimes having no research strategy costs more than time.

A research essay is time consuming, and although you aren't risking money, the quality of your paper will make a big difference in your final grade. Your time and your grade are two reasons that it pays to be thoughtful about *how* you approach gathering and using information. A typical "strategy" is something like this: (1) get the assignment, (2) choose a topic, (3) wait until a few days before the paper is due, (4) madly search the Internet, (5) write the paper the night before you have to hand it in, (6) pray.

This time, you've already approached the paper more strategically than outlined in the typical strategy. In the last chapter, you spent time exploring possible topics, narrowing your focus, and developing research questions that will help guide your search for information. This will make a big difference in the efficiency of your research in the library and on the Web. But what do experienced researchers know that will help you find what you're looking

for fast and use what you find effectively? Here's what you will learn this week:

1. How to create a chronology for the searches
2. How to control the language of your searches to get the best results
3. How to perform advanced searches at the library and on the Web, and how to use other sources of information, including surveys and interviews
4. How to evaluate what you find
5. How to take notes that will help you to begin writing your essay even before you begin the draft

## Google vs. the Library

Despite all the fat, the carbs, and the empty calories, the convenience of a Big Mac is hard to ignore. Similarly, a few minutes feasting on the information served up by Google is far more convenient than searching an online database at the university library. As one analyst put it recently, "Googling has become synonymous with research." Another called the relentless feast of online information "infobesity."

Should we be wringing our hands about this? The answer is yes and no. The power and accessibility of Google and other Internet search tools have turned virtually everyone into a researcher. No question is too arcane and no quest is completely hopeless when typing a few words into a search window allows you to lurch through millions of documents in a second. It's really hard to underestimate the wonder of this. Along with the junk, the results of Internet searches often turn up something useful, even for an academic paper. In fact, at least one study\* suggests that when Google searches are matched with searches on library databases, the popular search engine doesn't do too badly. When researchers looked for relevant documents on four test topics, they found a total of 723 sources. Google produced 237 of these, and the library databases turned up 163. Predictably, however, the documents from the library were generally of a much higher quality—they tended to be from more qualified sources: more up-to-date, more balanced, and more accurate. Still, while Google produced more stinkers, researchers concluded that 52 percent of its results were actually pretty good.

Undoubtedly, it's Google's accessibility that makes it so irresistible. In addition to avoiding a hike to the library or sorting through academic

databases online, Google gives you results you can often find and use immediately. In the Google matchup with the library, 90 percent of the documents produced by the popular search engine were instantly accessible, full-text articles, while the library fared less well—only 65 percent of those results were full text. In some cases, getting an article on a library database required interlibrary loan or a microfilm search.

Yet for all Google's appeal, in academic writing *quality matters*. A lot. You must always try to use accurate sources that are written by people who know what they're talking about. For those kinds of sources, your library is indispensable. The dilemma here is this: Do you value the accessibility of an Internet search above the quality of the library sources? At first, not many of my students struggle with this. Google wins, hands down. But, savvy researchers know that's like juggling with one hand—you're making it much harder than it needs to be. In academic research, you need as much relevant, accurate information as you can get. The answer, obviously, is to learn how you can complement your Google searches with library searches.

## A Complementary Research Strategy

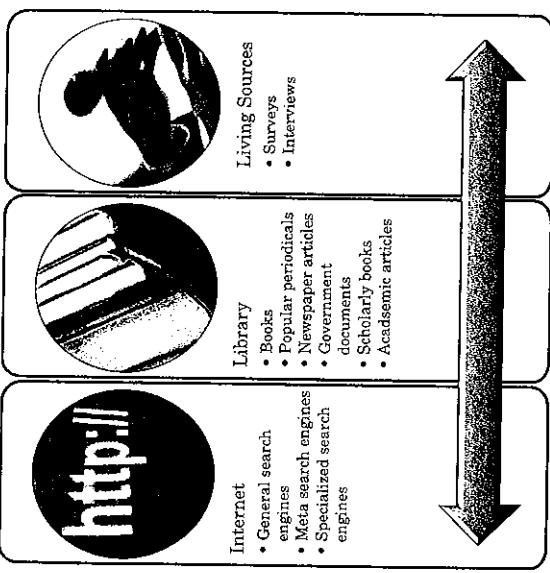
Writers are always better off when they work from abundance. It is far better to have more information than you can use because this allows you to understand your subject more deeply and focus your investigation more narrowly. Attack your research question on multiple fronts—the Internet, the library, and interviews or surveys—and you're much more likely to succeed in finding out what you want to know (see Figure 2.1). This inclusive approach will help you accomplish the three things that make up a sound search strategy:

1. Find enough information to fully explore a narrowly focused topic.
2. Find varied sources.
3. Find quality information.

## Find Enough Information by Using the Best Search Terms

Around my house a few years back, the Harry Potter phenomenon had everyone muttering magic words. "Flipendo," said Julia, trying to turn the dog into a gerbil. "Wingardium leviosa," said Becca, who was determined to elevate her little sister six feet off the ground. Chopsticks substituted for magic wands. I knew this because we

\*Brophy, Jan, and David Bawden. "Is Google Enough? Comparison of an Internet Search Engine with Academic Library Sources." *Aslib Proceedings: New Information Perspectives* 57 (2005): 498–512. Print.



**FIGURE 2.1** Maximize coverage of quality sources by investigating on three fronts.

suddenly had too few when the take-out Chinese meal arrived; that was the only part of this magical revival that swept the household, that I didn't much like.

Some writers foolishly think that there's magic involved in getting good words to the page when it's really much more simple and not at all mysterious: You have to have your seat in the chair and your fingers on the keyboard or curled around a pen. But there is a kind of magic you can perform as a researcher, and it also involves the right words uttered in the right order. How you phrase your search of a library database or the World Wide Web makes an enormous difference in the results. I've come to believe that this ability, almost more than any other, is the researcher's most important skill.

You can harvest more and better results by understanding and effectively using three search tactics:

- *Index searches* deploy the language that librarians use to catalog books and other materials in university libraries.
- *Keyword searches* in library databases use relevant terms with “connectors” like AND, OR, or NOT to produce better results.
- *Keyword searches* on the Web combine a string of terms, along with exact phrases to generate more relevant hits.

## Index Searches Using the Library of Congress Subject Headings

An advantage that libraries have over the Web is that information in libraries is more organized. That's the good news. The bad news is that there is so much information to organize that librarians had to develop a special language for searching it. It's not alien language—the words are familiar—but it is a language that requires that certain words be used to reflect the way librarians organize information. These searches, called *index searches*, may therefore initially seem less straightforward than the more familiar *keyword searches*.

More specifically, reference librarians use something called the *Library of Congress Subject Headings (LCSH)*, which divides all knowledge into areas. These divisions are the *index terms* that you can use for index searches, which will almost always help you to find more relevant books on your topic. How do you find out these index terms? A couple ways: There is a four-volume book in your library's reference room—sometimes called the “Red Book.” These volumes are the standard reference to index terms. You can also go online to search the *LCSH* (<http://authorities.loc.gov/>). There you can search by subject, name, or title, and the software will tell you what subject headings to use when searching for books in the library. But the easiest method to know what Library of Congress (LOC) terms to use is to go to your library's online book database and do an initial search with terms you *think* might work. When you find relevant books, you'll likely see the relevant LOC terms in your results. For example, I did a keyword search using the term *cyberterrorism* in my library's book database and found a great book: *Cyberterrorism: The Use of the Internet for Terrorist Purposes*. The results page suggested the following index terms as active links that would help me narrow my search:

**Cyberterrorism—Prevention**

**Computer networks—Security measures**

**Computer security—Law and legislation**

Knowing these index terms is a huge help, particularly in the early stages of a research project. Just enter the suggested terms in your library online book index, and you'll be surprised by the quality of the results.

## Keyword Searches in Library Databases

Compared to a Google search, library database searches (see a list of some of these databases on pages 79–80) rely much more

on coming up with keywords and trying them in different combinations. For example, searching for books using the word "Wildfires" will produce an avalanche that will quickly bury you. Efficient research requires that you maximize the number of relevant results and minimize the number of irrelevant ones. That's where searches that use careful combinations of keywords are so important. Many libraries and Internet search engines use something called "Boolean" connectors to help you when you search databases. (These connectors were invented by George Boole, a British logician, more than 100 years ago.)

The system essentially requires the use of the words AND, OR, and NOT between the search terms or keywords. The word AND, say, between "Animal" and "Rights" will search a database for documents that include *both* of those terms. Just keying in *animal rights* without the AND connector will often get the same results because the AND is implied. If you want to search for *animal rights* as an exact phrase, most library databases ask you to put the phrase in parentheses rather than quotation marks.

The use of the connector OR between search terms, obviously, will produce a list of documents that contain either of the terms. That can be a lot of results. In the early stages of your project, you might want to browse a heap of results; that way you can explore different angles on your topic, see the more common treatments, and discover some alternative search terms. The NOT connector is less frequently used but really can be quite helpful if you want to *exclude* certain documents. Suppose, for example, you were interested in researching the problem of homelessness in Washington State, where you live. To avoid getting information on Washington D.C., where it's also a problem, use the connector NOT.

two states, Idaho and Montana. You might construct a search phrase like this one:

### **(Montana OR Idaho) AND animal AND rights AND ethics**

Putting the two states in parentheses tells the software to prioritize Montana or Idaho in the results, generating a much more focused list of sources related to animal rights and ethics.

#### **Keyword Searches on the World Wide Web**

In the last chapter, you did a subject search on the Web, using popular sites, such as the Internet Public Library (<http://ipl.org>), that specialize in those kinds of searches. Far more common are searches that use so-called search engines, such as Google. As you probably know, these are remarkable software programs that in a split second "crawl" the Web, searching for documents that contain the keywords you type in. Lately, the magic of these search engines has been tarnished a bit by commercialism, allowing advertisers to purchase priority listings in search engine results and not always making that fact obvious to the searcher. But these search engines are still essential and getting better all the time.

Keyword searches are the most common method of searching the Web, used much than subject searches. Unfortunately, there isn't consistency in search languages. Some permit Boolean searching. Some use a variation on Boolean that involves symbols rather than words.

#### **What Students Say About How Students Research Online**

As you can see from the example above, it's possible to use the connectors between a number of terms—not just two. In fact, the art of creating keyword searches is using both the right words (those used by librarians) and using them in the right combinations (those that in combination sufficiently narrow your search and give you the best results).

One final search technique that can be very useful, especially in library database searches, is something called "nesting." This involves the use of parentheses around two or more terms in a phrase. This prompts the computer to look for those terms first. For example, suppose you were searching for articles on the ethics of animal rights, but you were particularly interested in information in

- Most use a trial-and-error approach to searching.
- They rarely use anything more than basic searches, avoiding advanced searching features.
- Typically, they use only two search terms every session, and these search sessions last an average of 15–19 minutes.
- Only 8 percent use Boolean operators.
- 60 percent admit that they are overwhelmed by the amount of information available to them.
- Nearly three-quarters use the Internet rather than the library.

But Google, the giant of search engines, has made all of this a bit simpler through the search form provided by its Advanced Search option. You can find this on Google's search page. Once in Advanced Search, you can use the boxes provided to perform all the usual Boolean tricks but without having to use the “connector” words like AND, OR, or NOT.

Because of the mind-boggling amount of information on the Web, careful keyword searches are critical. Researchers waste more online time either not finding what they wanted or sifting through layers and layers of irrelevant documents because of thoughtless keyword searches. For example, notice in Figure 2.2 how the search on the relationship between social networks and friendship can be dramatically changed by adding terms. An initial search on Google simply using the keywords *social* and *network* produced a mind-boggling 334 million documents. Just adding *one more* keyword cut the number of hits by 6,000 percent! Finally, when combined with a phrase (“intimacy of friendship”), a search with the two terms *social* and *network* yielded significantly fewer and more focused results.

## Find Varied Sources

One of the first things I notice when I'm reading research essay drafts is whether the writer leans too heavily on a single source. Does an author or article reappear again and again on page after page, like a pigeon at a favorite roost? This is not good. It typically means that the writer has too few sources and must keep turning to these few, or one source is especially relevant to the

topic, and the writer can't resist repeatedly inviting the author to reappear.

Vary your sources. This not only means using a sufficient number so that your essay is informative but also using different *kinds* of sources whenever you can. In part, the kinds of sources you rely on in preparing your paper depend on your topic. Remember my research question on competing theories of dog training? That's a current topic. There's an ongoing debate online and on cable TV about which approach is best. In addition, the topic has a history in the published literature. I'll be checking both newspapers and magazines, along with Web sites, but I'll also search the journals and books at the library. If you're writing about whether the release of secret documents by WikiLeaks endangers U.S. service members in Afghanistan, then much of your information will come from current sources; you're less likely to find books.

There are several ways to think about how sources can be distinguished from each other:

- Are they primary or secondary sources?
- Are they objective or subjective?
- Are they stable or unstable?

## Primary vs. Secondary Sources

One way of looking at information is to determine whether it's a *primary* or a *secondary* source. A primary source presents the original words of a writer—his speech, poem, eyewitness account, letter, interview, or autobiography. A secondary source analyzes somebody else's work. Whenever possible, choose a primary source over a secondary one, because the primary source is likely to be more accurate and authoritative.

The subject you research will determine the kinds of primary sources you encounter. For example, if you're writing a paper on a novelist, then his novels, stories, letters, and interviews are primary sources. Research on the engineering of the Chicago River in 1900, a partly historical subject, might lead to a government report on the project or a firsthand account of its construction in a Chicago newspaper. Primary sources for a paper in the sciences might be findings from an experiment or observations. For a paper in business, marketing information or technical studies might be primary sources. A videotape of a theatrical performance is a primary source, while the reviews in the local newspaper are secondary sources.

## Objective vs. Subjective

For now, I'm going to sidestep the debate over whether *any* source can be fully objective and simply point out that, generally

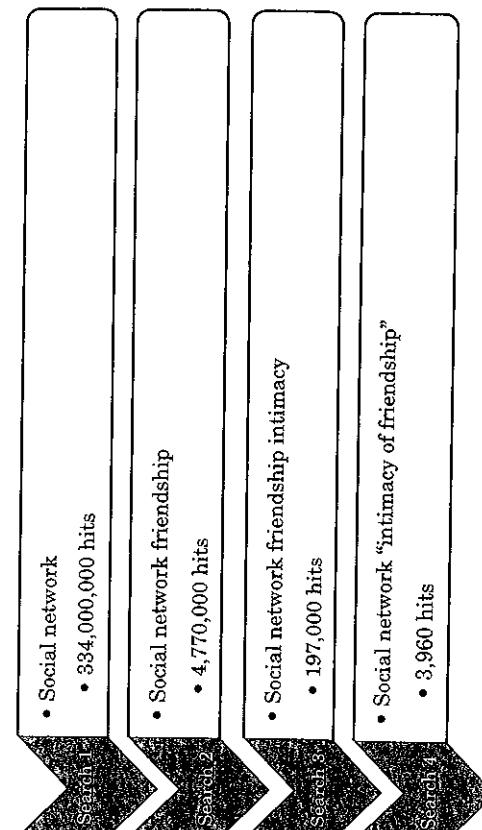


FIGURE 2.2 How Multiple Search Terms Narrow Results

speaking, we can divide all sources into those that attempt to report facts that have been gathered systematically, minimizing author bias, and those that don't pretend to be anything more than the author's opinion, perhaps supported by evidence gleaned from objective sources. You can probably guess some examples of objective sources: experiments, survey results, carefully designed studies of many kinds. The best of these are "peer reviewed" (see page 62) to double-check their accuracy. As you know, many academics prize these objective sources as the best evidence. Subjective sources are all over the map, from government propaganda to blogs to op-ed essays in the local newspaper. Of course, just because someone is pushing a point of view doesn't make a source useless. It just means that you need to consider how that point of view colors the source and read it more critically.

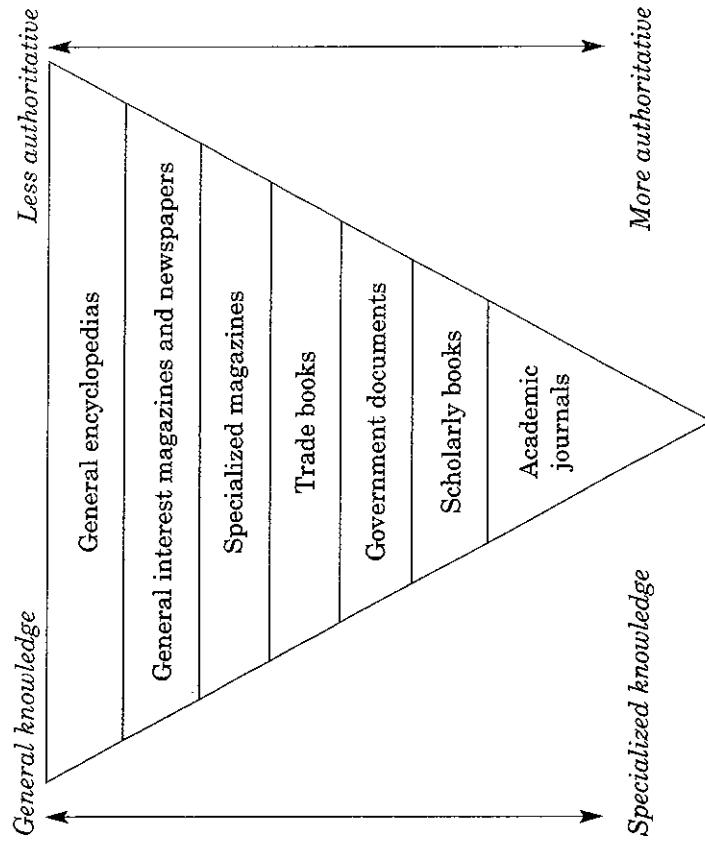
### Stable or Unstable?

When information went digital, a new phenomenon emerged; sometimes information simply disappears. That Web page you cited in your draft, with the great statistics on scooter fatalities, is there one day and gone the next. One of the reasons you cite sources in academic writing is so readers can consult them, making a missing Web page a serious problem. Disappearing Web pages, of course, are hard to predict, but you can make some judgments about the stability of an online source. Has it been around for a long time? Is it routinely updated? Are print versions of an online document available? Is the site associated with a reputable institution? Unstable sources are a shaky foundation for any academic essay. It's best to avoid them.

You're more credible because it's clear that you're willing to dig deeply to explore your research question.

### Find Quality Sources

The aim of your research strategy is not only to find interesting information on your topic but also to find it in *authoritative* sources. What are these? The highest-quality sources are those types found on the bottom of the upside-down pyramid in Figure 2.3. These are works that are most likely to be written by and then reviewed by experts in their field (see "What Does 'Peer Reviewed' Mean?" on p. 62). You find these "peer-reviewed" articles in scholarly journals, some of which are now available online as well as in the library. The downside of dealing with sources at the bottom of the authoritative pyramid is that they may be written in the *discourse* of the field; to you that may make the writing seem jargon-filled and hard to follow. Of course, as a nonspecialist you aren't the intended audience for the work. But the effort to make sense of an academic article really pays off. Your readers know that you're relying on the best information available; beyond that,



**FIGURE 2.3** Pyramid of Library Sources

### When Was It Published?

If you're researching the treatment of slaves in nineteenth-century New Orleans, then currency is obviously less of an issue than it might be if your project were to explore the impact of the Toyota Prius on marketing practices for hybrid vehicles. Generally, in any project related to the social sciences, a recent publication date carries more weight, which is one reason APA citations emphasize date of publication. The currency of Web pages and online documents can also be important. A site that is regularly updated is obviously more likely to have the latest information on the topic.

### Why Journal Articles Are Better Than Magazine Articles

If your topic has been covered by academic journal articles, rely heavily on these sources if you can. An article on, say, suicide

### What Does "Peer Reviewed" Mean?

Broadly speaking, periodicals, books, Web sites, and magazines are one of two types: scholarly or popular. Popular publications include magazines like *Newsweek* or online sites like *State*, which are staff written, usually by nonexperts for a more general audience. Scholarly publications are written and edited by experts for others in their fields, and the best of these are "peer reviewed." This means that before an article is published online or in print, a group of fellow experts read and comment on its validity, argument, factual accuracy, and so on. The article doesn't appear in print until this review is completed and the journal editor is satisfied that the other scholars think the work is respectable.

What does this mean to you? It means that you can count on the authoritative muscle of a peer-reviewed source to help you make a strong point in your paper.

### Not All Books Are Alike

When writing my high school research reports, I thought that books were always the best sources because, well, books are thick, and anyone who could write that much on any one subject probably knows what she's talking about. Naive, I know.

One of the things college teaches is *critical thinking*—the instinct to pause and consider before rushing to judgment. I've learned not to automatically believe in the validity of what an author is saying (as you shouldn't for me), even if she did write a thick book about it.

If your topic lends itself to using books as sources, then evaluate the authority of each before deciding to use it in your paper. This is especially important if your paper relies heavily on one or two books. Consider the following:

- Is the book written for a general audience or more knowledgeable readers?
- Is the author an acknowledged expert in the field?
- Is there a bibliography? Is the information carefully documented?
- How was the book received by critics? To find out quickly, search the Web using the author's name and title of the book as search terms.

among college students in a magazine like *Time* is less valuable than one in the *American Journal of Psychology*. Granted, the latter may be harder to read, but you're much more likely to learn something from a journal article because it's written by an expert and is usually narrowly focused. Also, because academic articles are carefully documented, you may be able to mine bibliographies for additional sources. And, finally, scholarly work, such as that published in academic journals and books (usually published by university presses), is especially authoritative because it's often subject to peer review. Other authorities in the field have scrutinized the author's evidence, methods, and arguments; the published work has truly passed muster.

### Look for Often-Cited Authors

As you make your way through information on your topic, pay attention to names of authors whose works you often encounter or who are frequently mentioned in bibliographies. These individuals are often the best scholars in the field, and it will be useful to become familiar with their work and use it, if possible, in your paper. If an author's name keeps turning up, use it as another term for searching the library databases or Google Scholar. Doing so might yield new sources you wouldn't necessarily encounter in other ways.

### Evaluating Online Sources

Librarians help maintain the order, stability, and quality of information in the library. By comparison, the Internet is anarchy. Everyone knows that you have to be vigilant about trusting the accuracy, balance, and reliability of Web documents. Unfortunately, there's continuing evidence that student researchers still have a hard time assessing the quality of online sources. While the criteria for evaluating sources just mentioned apply to Web documents, Web documents also deserve special attention.

Here are some general guidelines to follow (later I'll suggest a more vigorous approach for evaluating online sources):

- *Always keep your purpose in mind.* For example, if you're exploring the lobbying methods of the National Rifle Association, then you will want to hear, and see, what this organization has to say on its Web site. In looking at the NRA Web pages, you'll know full well that they are not unbiased; however, for your purpose, they are both relevant and authoritative. After all, who knows more about the NRA than the NRA?
- *Favor governmental and educational sources over commercial ones.* There are plenty of exceptions to this, but in general you're

wise to rely more heavily on material sponsored by groups without a commercial stake in your topic. How can you tell the institutional affiliation of sources? Sometimes it's obvious. They tell you. But when it's not obvious, the *domain name* provides a clue. The *.com* that follows a server name signifies a commercial site, while *.edu*, *.org*, or *.gov* usually signals an educational, nonprofit, or governmental entity. The absence of ads also implies a site is noncommercial.

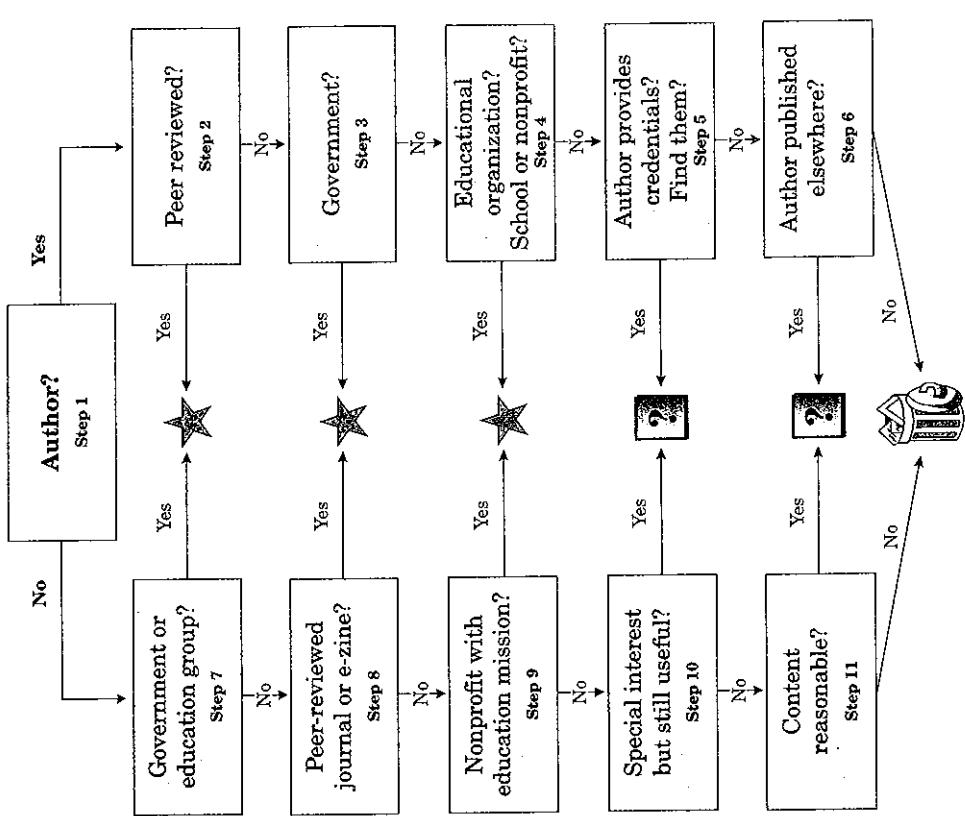
**Favor authored documents over those without authors.** There's a simple reason for this: You can check the credentials of an author. You can do this by sending an e-mail message to him or her, a convenience often available as a link on a Web page, or you can do a quick search to see if that author has published other books or articles on your topic. If writers are willing to put their names on a document, they might be more careful about the accuracy and fairness of what they say.

**Favor Web pages that have been recently updated over those that haven't been changed in a year or more.** Frequently, at the bottom of a Web page there is a line indicating when the information was posted to the Internet and/or when it was last updated. Look for it.

**Favor Web sources that document their claims over those that don't.** Most Web documents won't feature a bibliography. That doesn't mean that they're useless to you, but be suspicious of a Web author who makes factual assertions without supporting evidence.

**A Key to Evaluating Internet Sources.** As an undergraduate, I was a botany major. Among other things, I was drawn to plant taxonomy because the step-by-step taxonomic keys for discovering the names of unfamiliar plants gave the vegetative chaos of a Wisconsin meadow or upland forest a beautiful kind of logic and order. The key that follows is modeled after the ones I used in field taxonomy. This one is a modest attempt to make some sense of the chaos on the Web for the academic researcher, particularly when the usual approaches for establishing the authority of traditional scholarship and publications fail—for example, when documents are anonymous, their dates of publication aren't clear, or their authors' affiliations or credentials are not apparent.

If you're not sure whether a particular Web document will give your essay credibility, see Figure 2.4 and work through the following steps:



**FIGURE 2.4** Follow the flowchart for a rigorous review of a Web document or page, beginning with whether the author is obvious or not. Sites that earn stars are generally more trustworthy. Those with question marks still may be useful, depending on the situation. Be particularly wary of information on commercial or special interest sites.

#### Authored Documents

1. Does the document have an author or authors? If yes, go to Step 7.
2. Does the document appear in an online journal or magazine that is "refereed"? In other words, is there any indication that every article submitted must be reviewed by other scholars

- in the field before it is accepted for publication? If yes, you've found a good source. If no (or you're unsure), go to Step 3.
3. Is the document from a government source? (Online, look for the .gov domain.) If yes, then it is likely a good source. If no, go to Step 4.
  4. Does the document appear in an online publication affiliated with a reputable educational institution (e.g., a university) or nonprofit educational organization (e.g., the American Cancer Society)? (Online, look for the .edu or .org domain.) If yes, it's likely to be trustworthy. If no, go to Step 5.
  5. If the author isn't clearly affiliated with a reputable institution, does he or she offer any credentials that help establish expertise on the topic? (For example, an advanced degree in the relevant discipline is encouraging.) If credentials are missing, can you find an author's credentials by Googling the author's name? Is there an e-mail link to the author so you can inquire about affiliations or credentials? If no, go to Step 6.
  6. Has the author published elsewhere on the topic in reputable journals or other publications? Check this at the library by searching under the author's name in the catalog or appropriate databases. If no, reconsider the value of the source. You could be dealing with a lone ranger who has no expertise on your topic and no relevant affiliations.

### Unauthored Documents

7. If the online document has no author, is it from an institutional source like a university (.edu) or the state or federal government (.gov)? If yes, then chances are the document is useful. If no, go to Step 8.
8. Is the anonymous document published in an online journal or magazine? Is it refereed? (See Step 2.) If yes, it's likely a good source. If no, go to Step 9.
9. Is the document part of a publication or Web page from a non-government source whose mission is described in the document and does it suggest that the organization's goals include research and education? Is there a board of directors, and does it include professionals and academics who are respected in the field? If no, go to Step 10.
10. Even if the organization offering the information represents a special interest group or business with an axe to grind, the information may be useful as a means of presenting its point of view. Make sure, if you use it, that the information is qualified to make that obvious.
11. Does the site seem reasonable? Try to apply the usual criteria for evaluating a source to this anonymous document. Does it

have a citations page, and do the citations check out? Was it published on the Internet recently? Does the argument the writer is making seem sound? Do the facts check out? If the answer is no to all of the above, then don't trust the document. If you can answer yes to more than one of these questions, the material might have some marginal value in a college paper.

A good researcher always takes a skeptical view of claims made in print; she should be even more wary of claims made in Internet documents. And while these approaches for evaluating online sources should help, it still can be pretty tricky deciding whom to take seriously in cyberspace. So to sort it all out, always ask yourself these questions: How important is this Internet document to my research? Do I really need it? Might there be a more reliable print version? For an example, see Figure 2.5.

**Saturday, January 2, 2010**

**Predominant Falsification in Dominance Dog Training Theories**

Written by Charlotte Wagner of the Canine Paws Academy

With the fluctuating economy and increase in pet abandonment due to behavioural issues, it is not surprising to see many pet owners turn to television shows and books for guidance on training issues. Unfortunately many people who watch hit TV shows such as Cesar Millan's 'Dog Whisperer', "Dog Bonsai" or follow Jan Fennell's 'Ariochien Bonding are unaware of how unfounded dominance-based methods and techniques may be and what psychological ramifications they can potentially have on their pets. Unfortunately dog training and behaviour is an unregulated field where seen...

**Bandit**

**click > dog training tips, articles, and information**

**Facebook Network Blog**

**Follow this blog**

**FIGURE 2.5 Evaluating a Web Site: A Case Study** I'm writing about the debates between dog trainers, and I encountered this site. "Pam's Dog Academy" is a blog, and it's got some really interesting information. Overall, how would you evaluate this site as a source for my essay? What exactly do you see that influences your judgment about that? Is there anything about the site that you might want to know? How would you find it?

↳ *After a second thought to the validity of the information being provided to the reader.*

Behaviourist James O'Hearn (2003) claims that: "Dominance theory is probably the most misunderstood commonly used ethological theory in the dog behaviour field." There are a variety of views on dominance, including those advocating dominance as a personality flaw where the dog is trying to take over the owner: "When a dog acts at the wife or kids in the family, it sees itself as a higher rank than family members." (Frawley, 2009) and modern establishments opposing the use of dominance-oriented intimidation techniques: "Sadly, many techniques used to teach a dog that his owner is leader of the pack is counter-productive; you won't get a better behaved dog, but you will either end up with a dog so fearful it has trouble and communication regarding appropriate behaviours, and one in which their need for mental and physical stimulation is addressed." B. F. Skinner's operant principles of positive reinforcement and negative punishment can easily aid in the increase of desired behaviours and the extinction of undesired traits with the use of motivation rather than intimidation and suppression through aversion. There are many associations certifying trainers and behaviourists which promote the use of learning theory and scientific methods of understanding and modifying behaviour. Many of these respected bodies require professionals to either: have a degree relevant to animal behaviour; further education in training, or extensive experience with another qualified professional before accepting applicants to become members. These associations include but are not limited to: the Association of Pet Dog Trainers (APDT), International Association of Animal Behaviour Consultants (IAABC), Association of Pet Behaviour Consultants (APBC), Certified Council for Professional Dog Trainers (CPDT) and International Positive Dog Training Association (IPDTA) to name a few.

**Written By Charlotte Wagner of the Canine Paws Academy**  
1 January 2010

#### RESOURCES

- Association of Pet Dog Trainers. (2009). Dominance and Dog Training: Association of Pet Dog Trainers position statement [www document]. [http://www.apdt.com/about/pet\\_dominance.aspx](http://www.apdt.com/about/pet_dominance.aspx) (Accessed 7 December 2009)
- Coppinger, L. and Coppinger, R. (2004). Dogs: A new understanding of canine origin, behaviour and evolution. Romford, Essex: Crosskeys Select.
- Dennis, P. (2005). How to Right a Dog Gone Wrong. Loveland: Alpine.
- Donaldson, J. (1996). The Culture Clash. Berkeley: James and Kenneth.
- Fennell, J. (2006). The Practical Dog Listener. London: HarperCollins.
- Frawley, E. (2009). Dealing with the Dominant Dog [www document] <http://eaeburg.com/pdf/dealingwithdominantdogs.pdf> (Accessed 10 December 2009)
- Millan, C. and Pettitt, M. J. (2005). Cesar's Way. New York: Crown.
- O'Hearn, J. (2003). Dominance Theory and Dogs. Ottawa: DogPsych.
- Science Daily (2009). Using Dominance to Explain Dog Behaviour is Old Hat [www document] <http://www.sciencedaily.com/releases/2009/05/090521142231.htm> (Accessed 7 December 2009)

## Developing Focused Knowledge

If working knowledge equips you to sustain a 1-minute dinner conversation on your topic, then focused knowledge is enough for you to make a 15- or 20-minute presentation to the rest of the class (for more on presentations, see the box "Working Together: In-Class News Conference"). You'll probably be able to answer all of your classmates' questions. You'll hardly be an expert, but you'll probably know a lot more about your topic than any of your peers.

Focused knowledge is the product of smart research this week and the next, refining your search terms, knowing where to look for the most useful information, and using your time efficiently. As you'll see later in this section, focused knowledge also depends on what you do with what you find. Most important, especially at this point, are these two questions:

1. Is this information relevant to my inquiry question?
2. Does it change my question?

At its most basic, relevance is simply deciding whether that article or book you found is on topic. Say you're researching the disappearance of the world's frogs, and you find a *Scientific American* article called "Extinction Countdown: World's Frogs Are Disappearing." It obviously couldn't be more relevant. But, as you develop more focused knowledge, you can make more focused judgments. *How* is a source relevant? With some traditional research papers, this question may simply mean, how does it support my point? But genuine academic inquiry is about discovery, and because it begins with questions, information isn't just used to line up ducks in the service of a preconceived point. The relevant sources you encounter online and in the library can help your project in many more ways:

■ **Refine the inquiry question.** Last week your question was, "Why are the world's frog's disappearing?" But you read some articles and browse some books and you realize that a more focused and interesting question is this: "How is climate change influencing the worldwide decline in amphibians?"

■ **Help the literature review.** A very common move in most academic research is establishing what has already been said about the question you're posing. Which scientists have published on frogs and climate change? What do they agree on? What are the disagreements? What don't they know?

FIGURE 2.5 (Continued)

Bandit's Puppy Picture Photo Contest...

Training your dog to come when called, reliability...

Clicker Mechanics

Why Not Punishment?

Debunking the Dominance Myth - Dog Public

Pet dogs rival humans for emotional satisfaction

Predominant Falsification in Dominance Dog Trainin...

► 2009 (67)

**About Me**

Pam's Dog Academy  
San Diego, CA, United States

I have been training for over 5 years. I opened my dog training business in 2007. I only train using clicker training and Positive Reinforcement.

[View my complete profile](#)

**Here are some awesome blogs...**

**DOGMANTICS**  
1 week ago

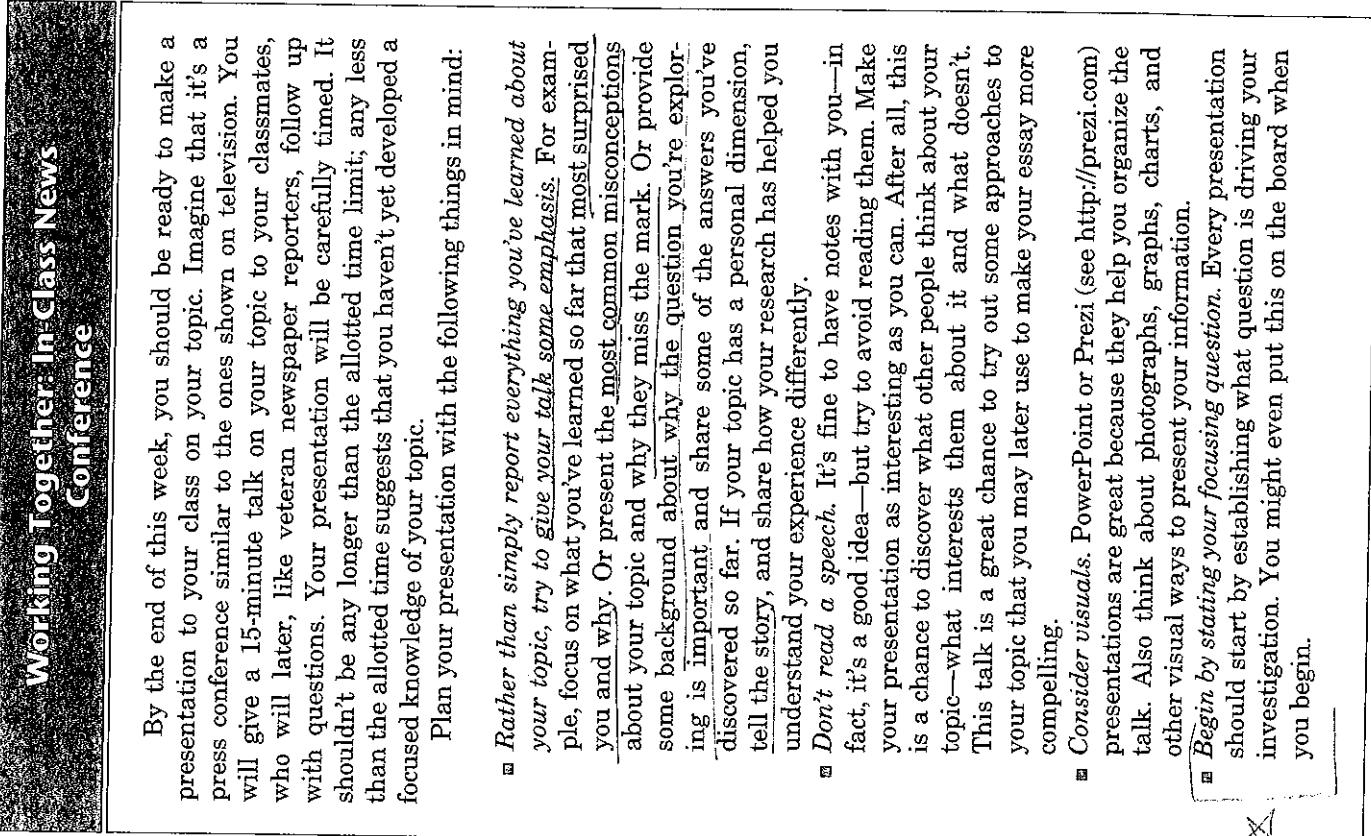
## Working Together: In-Class News Conference

By the end of this week, you should be ready to make a presentation to your class on your topic. Imagine that it's a press conference similar to the ones shown on television. You will give a 15-minute talk on your topic to your classmates, who will later, like veteran newspaper reporters, follow up with questions. Your presentation will be carefully timed. It shouldn't be any longer than the allotted time limit; any less than the allotted time suggests that you haven't yet developed a focused knowledge of your topic.

Plan your presentation with the following things in mind:

- *Rather than simply report everything you've learned about your topic, try to give your talk some emphasis.* For example, focus on what you've learned so far that most surprised you and why. Or present the most common misconceptions about your topic and why they miss the mark. Or provide some background about why the question you're exploring is important and share some of the answers you've discovered so far. If your topic has a personal dimension, tell the story, and share how your research has helped you understand your experience differently.
  - *Don't read a speech.* It's fine to have notes with you—in fact, it's a good idea—but try to avoid reading them. Make your presentation as interesting as you can. After all, this is a chance to discover what other people think about your topic—what interests them about it and what doesn't. This talk is a great chance to try out some approaches to your topic that you may later use to make your essay more compelling.

- *Consider visuals.* PowerPoint or Prezi (see <http://prezi.com>) presentations are great because they help you organize the talk. Also think about photographs, graphs, charts, and other visual ways to present your information.
  - *Begin by stating your focusing question.* Every presentation should start by establishing what question is driving your investigation. You might even put this on the board when you begin.



**FIGURE 2.6** Looking for Patterns

cloud" of the last 320 words you just read. A "word cloud" takes some text and creates an image that represents word frequency in the text. The visually bigger words are repeated more than the smaller ones. Note the pattern of emphasis on certain subjects and relationships—questions and information, relevance and research, change and focus. In a sense, when you develop focused knowledge on your topic, you gather a cloud of information much like this one, except richer and more complicated. Constantly analyze the relationships in what you're finding—what are the most frequent arguments, which ideas seem connected, what facts stick out?

### What About a Thesis?

Ultimately, you must have a thesis, something you are saying about your research question. But when should you know what that is?

### Are You Suspending Judgment?

Should you have a thesis at this point? That depends on the purpose of your project. If it's exploratory, if your motive is to discover what you think, then it's too early to make any bold statements that answer the question you're researching. It might even be counterproductive. Inquiry-based investigations depend on your willingness to suspend judgment long enough to discover what you think.

### Are You Testing Assumptions?

If, however, you feel that you have developed some ideas about what you want to say, now might be an excellent time to make a list of your theories, assumptions, or beliefs about your topic. They will be invaluable guides for your research this week because you can examine these beliefs against the evidence and potentially break through to new understandings about your research question.

### What Are You Arguing?

In some cases, you know what you think is the best answer to your research question even before you've done much investigation of that claim. For example, consider this claim: *Lawn mowers make a significant contribution to CO<sub>2</sub> emissions in the United States.* Maybe this is something you heard or read somewhere from a reputable source, and it's something you strongly suspect is true. Maybe your instructor asked you to make that argument, or you're writing an opinion piece

for an assignment. Conventional research papers are frequently organized from the beginning around a thesis or claim. If that's the kind of project you're working on, now would be a good time to craft a sentence that states your most important assertion or main idea. This may well be refined or even discarded later on as you learn more, but it will help with your research this week.

To generate a *tentative* thesis statement at this point, try finishing one of the following sentences:

1. While most people think \_\_\_\_\_ about \_\_\_\_\_, I think \_\_\_\_\_.
2. The most convincing answer to my research question is \_\_\_\_\_.
3. The main reason that \_\_\_\_\_ is a problem is \_\_\_\_\_, and the best solution is \_\_\_\_\_.
4. Among the causes of \_\_\_\_\_, the least understood is \_\_\_\_\_.
5. Though much has been said about \_\_\_\_\_, very little attention has been paid to \_\_\_\_\_.
6. All of the evidence so far about \_\_\_\_\_ points to \_\_\_\_\_ as a significant cause/solution/effect/problem/interpretation/factor.

You'll be implementing your research strategy this week and next, looking at sources in the library and on the Web. The exercises that follow will help guide these searches, making sure that you don't overlook some key source or reference. Your instructor may ask you to hand in a photocopy of the exercise as a record of your journey.

## Keeping Track of What You Find: Developing a Bibliography

For the next two weeks, you're going to collect a lot of material on your research question: PDF copies of articles, books, bookmarked Web pages, images, and perhaps even audio and video files. You will make your life easier if you don't just collect but *record* what you find. Your options include the following:

- **Basic bibliography.** This is the minimalist approach. You simply keep a running list, using the appropriate citation method, of information on each source you think you'll use in your essay. If you're using MLA, for example, this will become your Works Cited page. An online citation machine, like bibme (<http://www.bibme.org>) can help