



## Incorporate Research

### LEARNING OBJECTIVES

- 1 Explain the mind-set and skills you need before beginning any research project.
- 2 List the many sources available for research.
- 3 Evaluate the credibility of any research source you use.
- 4 Convey how to cite your research sources using the oral style.

### chapter preview

- 7A** Get Ready to Do Your Research
- 7B** Make Use of the Breadth of Sources Available for Research
- 7C** Evaluate Your Sources to Ensure Your Credibility
- 7D** Cite Sources for Listener Comprehension

*Review Questions*

*Key Terms*

*Exercises*

Although each of us has an impressive storehouse of knowledge and experience, it's impossible to know everything. Your informative, persuasive, and special-occasion presentations all benefit from looking beyond the borders of your own world. Information garnered from good research makes your presentation more listener-centered because it increases your understanding of your topic, and once you become better informed, you can better “own” and communicate the material clearly and confidently. Using credible research sources also increases the confidence your listeners have in your ideas because it reveals that you thoroughly investigated your topic, which enhances your credibility, and it adds specific support and evidence for the points you are making. This chapter provides tips for conducting research, examines various research sources, discusses recommended ways to evaluate and cite your researched material, and underscores the need for information literacy.

## 7A Get Ready to Do Your Research

Technology, especially the web, has made “looking things up” an almost automatic process. When you want to know what year *Wedding Crashers* was released or who will be teaching a certain course next term, you look it up. The easy availability of almost unlimited information has turned us all into everyday researchers; not so long ago, *google* wasn't a verb synonymous with online searching, but now that usage is familiar to nearly everyone.

Speech-related research, however, needs to go beyond everyday research skills. The good news is that you may possess several research skills—and perhaps some advanced ones—already. Whatever your level of experience, before beginning any research, there is a beneficial mind-set to adopt and some general tips to follow:

### 1. The research mind-set

It may sound obvious, but the best place to start is with your internal thinking and attitudes about research. To expend the effort in the most effective ways, and take full advantage of what good research can add to your speech, you first need to understand its value.

#### Believe in the power of good research

Some people look upon research as a necessary chore that has no inherent benefit. *My instructor said I have to use three sources for this speech.* Sound familiar? What these people are missing is how those three required sources, when chosen with purpose and care, are strengthening their public messages. In describing how he came to value research, one student, Jesse, noted what writers, speakers, and thinkers of all kinds know—that good research adds welcomed credibility and authority to their voices and ideas:

*I am not going to lie and say I love research. However, speechmaking, in its own strange way, actually motivated me to go out and look at the greater world around me. I wanted to be perceived as a credible speaker, and I knew I needed some additional research to enhance what I already knew. I didn't want to run out of things to say and end up giving a relatively empty speech.*

### Four goals of research

- Define a topic and identify multiple viewpoints.
- Understand the language used in the topic.
- Identify your speech's context.
- Search for, find, and evaluate relevant, credible sources.



The good news is that thanks to the web, the increasing availability of wireless and other fast, inexpensive web connections, and faster and more effective online search portals, locating these sources has never been easier. So the best place to start your research journey is by embracing these modern times when the vast world of human knowledge is so easy to access. But you've got work—interesting work—in front of you.

### Understand the goals of research

Every speech-related research project has four goals.<sup>1</sup> One aim is to understand the “big picture,” figuring out how the topic is defined and the different angles from which people approach it. Additionally, you need to understand the language, terms, and areas of discussion within the scope of the topic. Another goal is to conduct your research within the context of your project.

As a student, you're attempting to meet your instructor's expectations, which are not always easy to define. As a workplace or community speaker, you need to keep the organization's mission in mind. Finally, you need to seek out, assess, and secure relevant, credible sources.

### Know that the research phase can be frustrating

Research is rarely a straightforward process; in fact, it can be quite chaotic and stressful. You may not know exactly what you're looking for. The seemingly infinite amount of information can be overwhelming, and it's hard at the outset to separate the valuable sources from those that may be interesting but don't serve your speech purpose and points. You may hit a dead end. It's sometimes difficult to determine the quality and credibility of a given source. What you find may contradict what you thought you knew and cause you to rethink your speech purpose and points all over again. You may become fixated on satisfying that nagging desire to find “the perfect source,” even if this source doesn't always exist.

These challenges are very real experiences, but they are a natural part of the research process for everyone. You *will* get through them, and the more you deal with the challenges, the better you become at using the guidelines covered in this chapter to find and evaluate effective sources. Once you accept that the research path is not always straight or smooth, you will stay focused on your ultimate goal of preparing something meaningful to say to others. Keep these tips in mind for reducing the potential stress of the research process:

- **A focused thesis makes for focused research.** The more narrowed your thesis (see Chapter 6), the more you'll be able to target the information you need. Remember, a speech needs to communicate one idea well; it needn't go beyond that and achieve herculean proportions.

- **Be open to whatever the research yields.** On occasion, your research can provide a new and better thesis and/or main supporting points than the one you had at the start of your journey for sources. You may come across an exciting and whole new way of looking at your topic that's much better suited for your intended audience.
- **Less can be more if the sources are the right ones.** A few comprehensive sources can be as helpful as multiple minor ones. An instructor or librarian can help you analyze the sources you find.
- **No research is a waste.** Research rarely goes unused. For instance, if your message is persuasive, knowing the opposing arguments can help you strengthen your own argument. Should you find yourself with “extra” research, know that new knowledge is never useless. That new information can come in handy during your question-and-answer session, and you also may save it for a future project.

## 2. The research tips

Follow these four basic guidelines, each described in greater detail below, to help you avoid the major pitfalls of the research process: start early enough to find your sources and make effective use of them; keep your particular listeners in mind as you research so that your sources result from a listener-centered mind-set; gather more material than you think you need; and create a documentation system to catalog what you find.

### Start early

As just mentioned, a lot happens during the research phase, and you'll need time to deal with it. The earlier you start your research, the better you understand the topic and the more time you have to shape your topic, finalize a relevant thesis, and create your supporting points. Some speakers claim that they work best under the pressure of a deadline, but this is often an excuse for procrastination. Simply put, the more time you give yourself to research, the more you're able to create meaningful ideas, absorb your material, and increase your degree of ownership and confidence.

### Keep your listeners in mind during research

Because you speak for the sake of your listeners, search for material relevant to what they need to know so that they can better interact with your ideas. Use your audience analysis (see Chapter 5), put yourself in your listeners' place, and ask yourself what *you* would need or want to know if you were an audience member. For example, before researching his assigned informative speech in his business class about what to expect in a pre-employment background check, Robert did a quick oral survey in class to assess classmates' knowledge of the screening process. Satisfied that their knowledge was as superficial as his own, Robert knew he needed to focus on the basics. He chose to begin his research by interviewing a professional in the pre-employment screening industry, assuming that this person knew from experience the typical questions asked by those being screened. The interview provided Robert a clear understanding of the basic information his audience

would need. The professional was also helpful in directing him to some additional sources that would enhance his speech even further, saving Robert a lot of research time.

### Gather more material than you think you need

While your research should be targeted to your thesis and main supporting points, remember that the greater your storehouse of background knowledge, the greater your chances for effective communication. Speakers report higher levels of confidence when they know a lot more than they end up sharing. Natalie, a second-year college student, shares her experience:

*As a first-generation college student, I am very interested in learning about the many ways—other than earning potential—a college degree is likely to make my adult life different from that of my nondegreed parents. I decided to use this topic for both my ten-page sociology paper and my ten-minute informative talk in speech class. Obviously, I was able to include many more ideas in the paper, but I realized that the amount of information I gathered for it actually ended up changing the whole experience of my presentation assignment. I liked going up there with all that knowledge. Though I had a clear plan for what I wanted to say, I knew I could change things at the last moment if I sensed the audience wanted it or needed it. And the question-and-answer session went really well. I had thought about these ideas so thoroughly that I was able to expand on my answers in unexpected ways.*

### Create a documentation system

Documenting researched ideas is one of your ethical responsibilities. If you haven't already read about plagiarism on pages 75–80, now is the time to do so. In addition to the ethics-oriented reasons to cite sources correctly, there's a practical reason as well: the flip side to our easy access to information is that if we plagiarize and don't document where the information came from, it's also easy to get caught. An increasing number of colleges and universities are using plagiarism-detection services such as Turnitin.com. You do not want to pay the price of slipping up—no matter how unintentional the plagiarizing. Consequences are often severe, ranging from a failed grade on the project to a failed grade in the course to academic probation to expulsion from school.

The best way to avoid plagiarism of all kinds is to make sure you have a complete record of all the sources you are considering using. When researching, create some sort of documentation system *at the beginning* of your project, and stick with it. You cannot rely on your memory to go back and find sources again later if your initial documentation was disorganized or incomplete.

Consistency in documentation is not only good discipline; it makes creating your bibliography or reference list much easier when you are required or asked to provide one. Additionally, if you ever develop your speech into another academic or professional project, your research notes will give you a great head start.

Whether you use a legal pad, notecards, an online bibliography management system like NoodleBib, RefWorks, or Zotero, or some other method, create a plan to link every

table 7.1 Key Information Needed to Document Research Sources

Type of source	Information you'll need to collect	Relevant tips
<b>Web source</b>	<ul style="list-style-type: none"><li>• Name of the website</li><li>• Name of the site host or sponsoring organization (if applicable)</li><li>• Title of the page</li><li>• URL, or Internet address, for the particular page and the website's home page</li><li>• Name of the author, editor, or compiler (if available)</li><li>• Date published (if available)</li><li>• Date you accessed the information</li></ul>	<ul style="list-style-type: none"><li>• Web links often go "dead," are moved, or link to altered contents over time. Print out the web source material so that you have something to refer to.</li><li>• Make sure the URL is visible on your printout.</li></ul>
<b>Book</b>	<ul style="list-style-type: none"><li>• Title (and subtitle, if applicable) of the work</li><li>• Name(s) of author(s) or editor(s)</li><li>• Edition and volume (if applicable)</li><li>• Page(s) on which the information is found</li><li>• Date of publication</li><li>• Publisher information (name, city, state)</li></ul>	<ul style="list-style-type: none"><li>• Do an online search of the author's name to check credibility and find related publications that may be useful.</li><li>• See if the author has related publications that are more current.</li></ul>
<b>Article</b>	<ul style="list-style-type: none"><li>• Title of the article and periodical</li><li>• Name(s) of the author(s) (if available)</li><li>• Volume and issue (if applicable)</li><li>• Date of publication</li><li>• Page(s) on which the information is found</li></ul>	<ul style="list-style-type: none"><li>• Bookmark or make a copy of the original article in case you need to refer to it later for quotes or statistics.</li></ul>
<b>Interview</b>	<ul style="list-style-type: none"><li>• Name and title of the interviewee</li><li>• Date and location of the interview</li></ul>	<ul style="list-style-type: none"><li>• Record complete contact information in case you need to get in touch with this person again.</li></ul>

speech idea to its source and use it fully and regularly. The citation style you use (MLA, APA, CSE) determines the formatting of the research source for a bibliography. It helps to know the style ahead of time; for academic research projects, the course area usually determines the citation style, but your instructor can confirm the preferred format. In general, however, you will want to keep track of certain key pieces of information for all research sources used, regardless of your particular speech context. Table 7.1 provides a handy reference for commonly used sources.

## 7B

## Make Use of the Breadth of Sources Available for Research

Research sources fall under two broad categories. **Primary research** collects data from first-hand sources—experiments, case studies, surveys, observation, and interviews. You may perform primary research yourself—create and conduct an experiment, a case study, survey, observation, or interview—or you may locate another person’s primary research among the many sources discussed in this section. **Secondary research** summarizes and synthesizes existing research gathered, collected, or organized from other sources, and is found in print and electronic sources of all kinds.

The almost-instant ease of access from remote locations often makes using the web to locate research the first choice for students. While an impressive amount of quality research can be accessed online, not everything is available on the Internet, and a great deal of what is there is not reliable. Many other sources of research are still absolutely relevant, and your instructor may even require you to use some of them. Let’s look at all your source choices, starting with digital information. The next section in the chapter (7C) provides guidelines on assessing the credibility of these sources.

### 1. Digital information

The Internet offers researchers an extensive array and amount of information. Separating what’s useful and credible from what isn’t becomes easier when you learn to recognize the basic categories and forms this web-based information can take: websites, search engines, specialized search engines, the invisible web, ask-an-expert sites, virtual libraries, databases, discussion groups, blogs, online reference resources, online journal articles, online newspapers and magazines, and online books.

#### Websites

Web-based information has become such a common part of our world; most people know what websites are because they use them for information gathering, big and small, every day. We use websites for everything from looking up a movie time to finding a campus building location to buying gifts for family and friends. For researching purposes, however, it’s useful to define websites in specific terms: websites are locations on the Internet containing information, visuals, sound, and video on a given topic. Millions of individuals, companies, schools, and organizations—from AAMCO to the Miami Heat to the Zoological Society of Manitoba—own and manage their own websites. Many organizations provide search functions within their own websites, allowing you to quickly navigate their archive of online content. Many websites offer recommended links to other related sites as well, which are good sources of additional research paths. In the expansive online universe, more often than not, a website will be your virtual doorway to online research and sources, including to many of the other categories described below (e.g., ask-an-expert sites, blogs, and online reference resources, newspapers, magazines, and books).



## Search engines

A **search engine** is a software program that allows users to access online information about a given topic through a **keyword search**, the act of entering a few topic-related terms to cue the search engine to narrow down the information you're looking for. Google, Yahoo!, and Bing are among the most popular search engines, though Google currently hosts about two-thirds of all web searches in the United States.<sup>2</sup>

## Specialized search engines

Most people are familiar with general search engines like Google, but other specialized search options exist to help you find the research you need and want more quickly and efficiently. WebQuest provides a long list of specialized search engines and directories, including those for biographies, military information, federal legislation, and even TV episodes. Find the list by using keywords "specialized search engines webquest."

## The invisible web

Not all information available on the web is fully searchable from general search engines like Google. The **invisible web**, or deep web, contains information that general search engines cannot access, including databases, virtual libraries, licensed information, and deliberately excluded pages. CompletePlanet and Infomine are two great places to access the invisible web. Most campus library websites also allow you to access the invisible web. Ask a reference librarian if you need assistance.

# SPEAK Responsibly

## Keep Your Internet Research Skills Current

The rapid pace of technological progress makes it essential that you keep your Internet research skills up-to-date. Many college and university library websites provide helpful tutorials on all sorts of topics, including:

- Recommended search strategies
- Search engines
- Subject directories
- Meta-search engines
- The invisible web
- Evaluating web pages
- Citing sources (The University of California–Berkeley Library is one such helpful site. Find it by typing *finding information on the Internet Berkeley* into your search engine.)

- What are you doing to stay up-to-date with online research skills?



### Ask-an-expert sites

There are innumerable sites where you can post a question on a forum and receive an answer from—theoretically—someone who has expertise in the area, usually within 24 hours. Some sites charge a fee though several are free. Try AllExperts.com, DoctorsLounge.com, Answers.com, or Ask a Mad Scientist. As with all sources, however, you will need to confirm the site's credibility. Going to another site or sites to verify information that they send you is also smart practice.

### Virtual libraries

**Virtual libraries**, or digital libraries, contain much of what you would find in print collections, but allow you to access it in digital format. Some virtual libraries are general (e.g., ibiblio and ipl2), some access international collections (e.g., Digital Library of India), some are discipline-oriented (e.g., arXiv, for scientific papers in math, physics, and astronomy), whereas others are topic specific (e.g., The Complete Works of Charles Darwin). Wikipedia has a relatively complete list of virtual libraries. Find it by searching for “list of virtual library projects” from the Wikipedia home page.

## Examples of databases

### Major databases for articles

- ProQuest
- LexisNexis Academic
- InfoTrac Newspapers

### Academic databases

- JSTOR
- Google Scholar
- InfoTrac OneFile

### Specialized Databases\*

- WorldCat—catalog of libraries; allows searching of multiple libraries
- ABI/INFORM—business, economics, and management journals
- Scirus—enables searches of science-specific web pages
- CINAHL—Cumulative Index to Nursing and Allied Health Literature
- PubMed—U.S. National Library of Medicine database of biomedical literature citations
- PsycINFO—indexes and summaries of articles and content in psychology, psychiatry, and other similar disciplines

\*Often accessible via college libraries



### Databases

A **database** is a collection of data on a single topic or a variety of topics; it is organized so that the content can be easily accessed and managed. Databases exist for topics across the spectrum, including newspapers and periodicals, scholarly journals, flowers, genome projects, and U.S. patents. (See Figure 7.1 for an example of a search page from an academic database.) Some databases provide the full texts of articles, reports, and other content, while others provide **abstracts**, a summary of an article or publication.

### Discussion groups

A **discussion group** allows Internet users to discuss topics of mutual interest. Discussion groups are good starting points for researching users' attitudes and opinions, and many of them also include topic experts. Because many postings are unverified and virtually anonymous, always go to other research material to enhance or confirm what you learn from a discussion group. Discussion groups exist for just about everything—Abyssinian-cat owners, military-history buffs, panic-disorder sufferers, and all sorts of people in between.

figure 7.1 Google Scholar Advanced Scholar Search Page

Google Scholar is an academic database that you can use to find research and opinions in a variety of knowledge areas.

## Blogs

**Blogs** contain dated entries of commentary, opinion, or news on a given subject, usually in reverse chronological order. Hosted by one person or a group of contributors, blogs typically combine text, images, videos, and links to other relevant websites. Covering topics ranging from politics to books to local issues, some blogs have become highly influential. Nonetheless, because most are based on personal opinion, you must conduct follow-up research from an unbiased or original source before relying on a blog's "facts." Credible bloggers provide links to their primary sources.

## Online reference resources

The web has become a place to find sources once available only in print. Many credible encyclopedias, glossaries, and dictionaries are available digitally, including *Encyclopedia Britannica* and *Merriam-Webster's Online Dictionary*. Wikipedia is a highly popular online encyclopedia, but one that you'll want to use with caution. (See page 162 for more on online reference sources.)

## Online journal articles

Journals contain research and opinion relevant to various professionals and specialists. The articles in most journals are **peer-reviewed**, meaning that they have been found acceptable by other experts in the field prior to publication. While a full electronic library of journals is not yet complete, more titles are archived online each year. Some are available free to the public, while others are accessible only through paid subscription. Google Scholar is one database for finding relevant articles, including those in journals that range

## SPEAK Responsibly

### What Kind of Electronic Source Is This?

Many students report confusion when determining the nature of an online source.<sup>3</sup> It can require some investigation to figure out whether the electronic source you've found is a blog, web page, document, an article from a scholarly journal, magazine article, or some other format. Inspect the source to determine whether it is peer-reviewed fact, unbiased reporting, an open-source forum that anyone can edit, someone's opinion, or something else. Familiarize yourself with these various electronic sources and stay current on indicators that clue you in as to what they are (such as the "[edit]" indicator, which helps identify an open-source forum as such—see any Wikipedia entry for an example; the reverse chronological order of blog entries; or the domain identification, like .com, .gov, .mil, or .org, which you'll read more about later in this chapter). Your reference librarian or instructor can also help you scrutinize a particular source.

from the *International Journal of Tantric Studies* to *RePEc* (Research Papers in Economics). Your campus library is an excellent resource in helping you access online journals; in many instances, campus libraries pay the required subscription rates for the benefit of the campus community.

### Online newspapers and magazines

Most newspapers, magazines, and other periodicals publish online as well as in print. It's worth noting that while many titles are simply online versions of print formats, as our technological world evolves, digital and print content from the same title is no longer always matched up. Benefits of the online versions include updated or expanded text-based information unavailable at the time the periodical went to print, and expansive digital-only content like discussion opportunities with authors; additional photographs and video; and interactive graphs, charts, and statistics. Newspapers from the *Los Angeles Times* to the *Marion Record* (of Marion, South Dakota, population under 1,000) and magazines from *The Nation* to *Bird Times* are available online.

### Online books

Websites such as Online Books (hosted by the University of Pennsylvania) and Project Gutenberg are bringing full texts to the web, and you can download most of these for free to your computer or e-reader. Until recently, the percentage of books accessible online was pretty small, but with the advent of mobile ebook reading devices like the Kindle, the Nook, and the iPad, as well as smartphones, this digital format is the fastest-growing market in the book publishing industry and more books become available online each year. Commercial sellers like Amazon, Barnes & Noble, Kobo, and iBook all make

ebooks available for purchase, usually at lower prices than print books, and books that are in the public domain—everything from the novels of Jane Austen to philosopher Friedrich Nietzsche’s *Beyond Good and Evil* to American political revolutionary Thomas Paine’s *Common Sense and Other Writings*—are available for free.

## 2. Librarians

The old stereotype of the stern librarian whose only job is to stack books and shush everyone is long gone. Today’s librarians, especially at college and university libraries, are experts at access to information the majority of us probably don’t even know exists—from databases to statistics resources to videos to digitized image collections. Some people are hesitant to approach a librarian, who always looks busy doing something else. On the contrary, the reference librarian’s job is to help library users build proficient information literacy skills while finding and retrieving relevant, credible information. Phoenix College reference librarian Ann Roselle describes the profession this way:

*Everyone knows that reference librarians answer questions. However, we can also help you create dynamic class presentations. We can assist you in finding and integrating all kinds of information and multimedia to support your ideas. We will also guide you in the use of proprietary and public information so that you are in compliance with copyright law and fair use.*<sup>4</sup>

Many students report talking with a librarian only as a last resort, after they have found too much or too little in their research efforts. Instead, consider contacting a reference librarian at the start of your research process. Share the details of your assignment with your librarian and let him or her save you a lot of time by pointing you in the right direction and helping make your research relevant, efficient, and ethical. In one recent study, a whopping 90 percent of college students said they were “overwhelmingly satisfied” with the services of their librarian and 80 percent agreed that these professionals add value to their search process.<sup>5</sup> Find your librarian at the reference desk or online through the home page of your library’s website.

## 3. Books and other print resources

Though the Internet is easy to access and seemingly infinite, there is still much research that you can accomplish only through books and other print resources. A great many thinkers and creative people publish printed books on an endless number of subjects each year. Not all magazines, newspapers, and journals have a web presence. Reference sources, including encyclopedias, almanacs, atlases, and dictionaries, can be easier to use in hard-copy form; hard copies can also yield unexpected finds such as additional photos, informative figures, boxes, and graphs that aren’t in the electronic record. Finally, many sources written before the information explosion of the web are not yet available online, and some may never be. If necessary, see a reference librarian for help in accessing these print resources.

## 4. Organizations

Most organizations compile, house, and distribute information to anyone wanting or needing it. Contact the American Lung Association when looking for the latest research on lung disease or lung health, Mothers Against Drunk Driving when looking for information about drunk driving or underage drinking, or Planned Parenthood when seeking information about sexual health.

## 5. Government data

The U.S. federal government, in addition to state, county, and city governments, is required to collect, manage, and make available to its citizens various types of data. For example, the Census Bureau provides information ranging from payroll data for public employees to state government tax collections to statistics on prisoners in federal correctional facilities. Counties and cities provide information ranging from local ordinances to their operating budgets to vendors with whom they do business. Data from some foreign governments are also available. Much of this information is available on the web. You can also request it in person or in writing through the office of the particular government.

The **Freedom of Information Act**, enacted in 1966, ensures access to federal documents outside the boundaries of nine specific exemptions, including national security and public privacy information. The Electronic Freedom of Information Act, passed in 1996, makes many federal records available online. Requests must be made in writing to access any of these print or electronic records. Know that it can take months to get your request approved, if it will be approved at all.

## 6. Interviews

The world is full of people who know different things than you do. Some are experts in their fields. Most people, especially when asked by a student, are happy to talk about what they know and believe, and you've got nothing to lose by asking for an interview. Audience members also tend to be impressed when they learn that you've taken the time to do some primary research by conducting an interview. Mentioning your interview with a knowledgeable, credentialed person increases both your own credibility and the reliability of your information.

Interviews—whether conducted face-to-face, by phone, or by e-mail—take time and preparation. (See page 154 for some cautions about the challenges with using other platforms for interviews.) Be sure that you can efficiently find out what you need to know by conducting the interview, and earn the good will of the interviewee by fully preparing yourself ahead of time. Books and websites on proper interviewing etiquette are widely available, but here are some basic guidelines.

### Find the right interviewee

People know people who know other people, so it's easier than you may think to find the type of expert you're looking for. Ask those in your social circle—instructors, coworkers,

neighbors, professionals, and classmates. Click on the Staff Directory link on an organization's website, or call them and ask the office secretary for recommendations.

### **Expand interviewee options through social networking**

Social networking has also made locating people on the basis of common interests or areas of expertise easier and more efficient, even if you aren't linked directly through shared contacts. LinkedIn, a free networking site for professionals, allows people to search a database of members using a broad range of filters—by job title, location, skill set, company, and so on—and also offers the options of sending a message to potential new contacts. While it's more likely that you'll get a response from an interviewee if you have a mutual connection, in this age of near-instant communication, it's simpler than ever to identify and send an e-mail to someone who seems, in virtual form, to meet your interview criteria, even if that person is a stranger. Again, it never hurts to ask.

### **Be gracious**

Although most people are happy to offer their help, keep in mind that no one is required to give you an interview. Should someone grant you the gift of his or her time, be thankful and courteous at all stages of the process.

### **Schedule ahead**

Don't walk in to someone's office expecting to conduct an interview on the spot. Use the phone or e-mail to set things up in advance—to identify yourself, to find a time that works for both of you, and to tell the interviewee the specific purpose of the interview. For example, tell the tulip expert at the botanical garden that you are doing research for a presentation to your botany class on the recent pest infestation attacking tulip crops in Turkey. These specifics let the interviewee, if necessary, brush up on the topic to prepare for the interview. Also, if you're specific about what you need, even if the person can't help you, he or she can often steer you in the direction of someone who can.

### **Show up or call on time for the scheduled interview**

People are busy. Be prompt, and don't overstay your scheduled interval. Respect your interviewee's time.

### **Open the interview with some pleasantries**

Thank the interviewee for his or her time, and provide a reminder again of who you are and what information you're seeking. Fulfill your ethical obligations by being up front and honest about what you plan to do with the information you gather.

### **Plan questions ahead**

Plan most of your questions ahead of time, but allow room for follow-up questions that may arise during the interview. Do the relevant research before the interview so that you don't waste the interviewee's time with questions whose answers are easily available elsewhere.



### Be accurate

You don't want to compromise your credibility with errors. Double-check for correct grammar and spelling in your e-mails or any other printed materials the interviewee may see. Prior to phone and face-to-face interactions, learn how to pronounce any new or difficult words.

### Plan a recording strategy

Documenting the interview can end up being a big challenge, and preparation will ensure you don't waste time during the interview itself. Will you take notes as the interviewee talks, or will you use a recording device? Or will you do both? If you decide to take notes, will you do it by hand or on an electronic device? Whatever your inclination, it's important to have a plan in place beforehand—pen and paper, a fully charged laptop or tablet, a recording device, a combination. If anything you're using requires an electric outlet, you'll need to make sure you're meeting in a space that has one. If your equipment requires a battery, make sure it's charged. And always ask for permission ahead of time if you plan to record the interview.

### Dress professionally for face-to-face interviews

Look your best on the day of the interview. Don't undermine your credibility by dressing inappropriately or too casually.

### Extend your thanks

Send a follow-up note thanking the interviewee for his or her time and information. Whether you send it by e-mail or as handwritten or typed is a judgment call; e-mail thank-yous have become acceptable etiquette and are now, in fact, the most common format, but keep in mind that some people are still traditional or not tech-savvy. Your best bet is to use the interview setup interactions to formulate an impression of how comfortable the interviewee is with e-mail and other computer-mediated communication.

If appropriate, you can use your thank-you note as an opportunity to share the results of your interview. Tell how impressed your listeners were with the collected information, report on any follow-up questions you answered in the question-and-answer segment, or share the grade you got on the assignment.

### Be cautious and strategic about using digital platforms for interviews

If scheduling a phone or face-to-face interview isn't possible, conducting an interview by e-mail can be a viable default plan. Once your interview is confirmed, you can send your questions all at once, and the interviewee can send his or her responses by whatever deadline you have agreed on. However, keep in mind that this method can require more follow-up on your part than a phone or



Texting usually relies on abbreviated, shorthand language, making it ineffective for in-depth interviews.



face-to-face interview. There's also the risk that your interviewee won't get back to you within the agreed-on time frame. Because it is asynchronous communication, an e-mail interview will also function less like a fluid conversation, and there may be limited opportunity for follow-up. On the plus side, e-mail's written format means that so long as your e-mail defaults to saving your correspondence, the medium itself documents your interview.

Other digital methods, like texting and instant messaging, should be avoided for actual interviews. If your interviewee uses these platforms, it's fine to rely on them for confirming the interview time and place, but, despite their convenience, they are ill-suited for conducting interviews. Texting, by definition, is used by most people as an abbreviated form of communication, and it's unlikely you will be able to explore any topic in depth or get a complex answer from an interviewee in this medium. In addition, most text messaging packages are set up such that a certain number of messages are saved only for a limited period of time and aren't easily exported into other formats.

Similarly, while instant messaging (IMing) is expedient, free, and easily accessible to anyone with web access, in most programs, the IM conversation is viewable only while you are signed in, and messages are automatically deleted as soon as you sign out. Some IM services enable you to save and export the messages, but you would need to follow the manual steps to do that for your specific IM platform. And again, even if you can export the conversation, the medium is going to affect the level of depth of the conversation; keep in mind that the IM format itself is geared toward multitasking—conversing while doing other tasks on the computer—and you want your interview to command the full attentions of both you and the interviewee.

## 7C

## Evaluate Your Sources to Ensure Your Credibility

Because your own credibility is directly tied to the quality of the material you present, you must ensure the credibility of your sources. A wide range of source material is available, and the quality and reliability run from the highly credible to the somewhat credible to the entirely incredible. It's your responsibility as the researcher to thoroughly examine each source you use. Your listeners are expecting you to do your homework in order to give them reliable information and well-supported opinions. Make sure your research sources are trustworthy and enhance rather than detract from your integrity and trustworthiness.

### 1. A need for information literacy

**Information literacy** is at the top of the list of skills required of today's citizens of an information society. An information-literate person is one who recognizes the need for information and can then “find, understand, evaluate, and use (that) information in various forms . . . for personal, social, or global purposes.”<sup>6</sup> Six skills comprise the information-literacy process:<sup>7</sup>

1. *Task definition*: being able to define the problem and identify the information needed.
2. *Information-seeking strategies*: determining all possible sources and selecting the best sources.
3. *Location and access*: locating and finding information within sources.
4. *Use of information*: reading, hearing, or viewing the information and extracting that which is relevant.
5. *Synthesis*: organizing information from multiple sources and presenting it.
6. *Evaluation*: judging the effectiveness of the result and the efficiency of the information-seeking process you used.

These six skills are necessary whatever form your research source takes. Before looking at some of these forms, let's look at a tool you can use to assess the credibility of any research source you may use.

## 2. A tool for assessing the credibility of a research source

The Meriam Library at Chico State University presents several criteria for analyzing the credibility of *any* research source: currency, relevance, authority, accuracy, and purpose (forming the amusing acronym “CRAAP”).<sup>8</sup> Be thorough—use all five criteria before you decide to trust the information in or from the research source, be it in print or digital form. Evaluating sources using the CRAAP test (see Table 7.2) and other guidelines covered in this chapter is like all the other aspects of the speechmaking process. It takes practice, and the more familiar and skilled you become with the steps, the easier it will become.

Let's look at an example that shows the CRAAP test in action on a commercial blog. Zoe, a second-year college student contemplating a health and wellness major, decided to research the rise in the use of plastics as storage in the food and beverage industries for an informative speech assignment. Zoe had some purely factual information from several credible print and web sources, but she wanted a source with personal expertise. Some additional online research led to a brief article on a commercial blog called FoodHealer. The annotated screenshots in Figure 7.2A and Figure 7.2B (pages 158–159) indicate how Zoe was able to assess the article, the blog author, and the FoodHealer site enough to feel comfortable with using it as a source.

Most of what Zoe found about the FoodHealer site was reassuring and favored its credibility, but the lack of any author information was enough of a red flag that Zoe pursued her evaluation further. First she checked the “About This Site.”

Most people would have stopped there, rejecting the source because the author's anonymity would be suspect, despite all the other credible indicators. Zoe, however, took her analysis a few steps further. First, she sent a message to Celia the FoodHealer both via the site's Twitter account and to the provided e-mail address, explaining her assignment and research, and asking if she could get additional information to verify the site-provided credentials. She also did some creative online investigating. Because FoodHealer was a

table 7.2 CRAAP Test for Assessing Research Source Credibility

<b><u>Currency</u></b>	The timeliness of the information	<ul style="list-style-type: none"> <li>• When was the information published or posted?</li> <li>• Has the information been revised or updated?</li> <li>• Is the information current or out-of-date for your topic?</li> <li>• Are the links functional?*</li> </ul>
<b><u>Relevance</u></b>	The importance of the information for your needs	<ul style="list-style-type: none"> <li>• Does the information relate to your topic or answer your question?</li> <li>• Who is the intended audience of this information?</li> <li>• Is the information at an appropriate level (i.e., not too elementary or advanced for your needs)?</li> <li>• Have you looked at a variety of sources before determining this is one you will use?</li> </ul>
<b><u>Authority</u></b>	The source of the information	<ul style="list-style-type: none"> <li>• Who is the author, publisher, source, or sponsor?</li> <li>• Are the author's credentials or organizational affiliations given?</li> <li>• What are the author's qualifications to write on the topic?</li> <li>• Does the author have a reputation?</li> <li>• Is there contact information, such as a publisher or e-mail address?</li> </ul>
<b><u>Accuracy</u></b>	The reliability, truthfulness, and correctness of the informational content	<ul style="list-style-type: none"> <li>• Where does the information come from?</li> <li>• Is the information supported by evidence?</li> <li>• Has the information been peer-reviewed?</li> <li>• Can you verify the information in another (credible) source or from personal knowledge?</li> <li>• Does the language or tone seem unbiased and free of emotion?</li> <li>• Are there spelling, grammar, or other typographical errors?</li> </ul>
<b><u>Purpose</u></b>	The reason the information exists	<ul style="list-style-type: none"> <li>• What is the purpose of the information? to inform? teach? sell? entertain? persuade?</li> <li>• Do the authors/sponsors make their intentions or purpose clear?</li> <li>• Is the information fact? opinion? propaganda?</li> <li>• Does the point of view appear objective and impartial?</li> <li>• Are there political, ideological, cultural, religious, institutional, or personal biases?</li> </ul>

\*For a web source only

**Currency:** Blog post date is recent. Links are functional.

**Relevance:** The title and content reveal the article to be important information for this speech on plastics as a health issue.

**Authority:** The results based on the article page alone are too vague to be promising; aside from the “About This Site” link, very little is verifiable except that the source is a commercial (.com URL) nutrition-oriented opinion site, author unknown except by the “FoodHealer” business name.

**Accuracy:** Here the results are positive. The information in the anti-plastic opinion post is consistent with Zoe’s already-evaluated sources and contains no visible errors or typos. The post also references an article from a respected U.K. newspaper as a source; that article passes the CRAAP test and contains references to credible primary sources.

**Purpose:** The tone, content, and references of this article as well as the others Zoe looks at for reference indicate that the site is part informative and part persuasive, but the portions that are opinion are clearly stated as such and seem to be well-supported by objective materials.



figure 7.2A FoodHealer Blog, Article Post on Plastics as Packaging

blog intending to help promote a nutritionist’s private practice, chances were good that its author, if legitimate, would list her credentials elsewhere online.

Zoe was thorough and persistent, and in this case, it paid off with a source she could rely on with no doubts. After plugging “Celia” and “FoodHealer” into a basic Google search, Zoe turned up a LinkedIn professional profile page—basically, equivalent to a brief online résumé. The profile information was more complete: it listed the owner of

**Authority (revisited):** The “About This Site” page answered the previously unanswered questions about the author’s credentials. The FoodHealer blogger was an accredited holistic health counselor and nutritional consultant with certifications and degrees from several well-respected institutions. The sole concern was that she gave only her first name on the site.



figure 7.2B FoodHealer “About This Site” Page

FoodHealer as Celia Kutcher, a certified and accredited Brooklyn-based health counselor and nutritionist with more than a decade of professional experience in health and nutrition. Fortunately, Zoe also heard back from Celia herself; not only did that exchange confirm Celia Kutcher as a knowledgeable expert in health and nutrition, it also resulted in an unexpected, follow-up interview that greatly enhanced Zoe’s final speech.

Let’s next focus our conversation on several research sources where information literacy skills are paramount.

### 3. Assessing digital information

A recent information-literacy national progress report found that “no matter where students are enrolled, no matter what information resources they may have at their disposal, and no matter how much time they have, the abundance of information technology and the proliferation of digital information resources make conducting research uniquely paradoxical: *Research seems to be far more difficult to conduct in the digital age than it did in previous times.*”<sup>9</sup>

Indeed, as citizens of information societies, we are interfacing with ever-evolving digital resources—and it can be an overwhelming and time-consuming experience. But the greater your degree of information literacy, especially in regard to digital sources, the more efficient your research will be, and ultimately, you’ll be in a position of academic, career, and personal advantage.

## SPEAK Responsibly

### **.com, .org, .gov: The Revealing URL**

A website's address, also known as the URL, can be helpful in assessing the website's purpose. While codes in the URL—especially the suffix—are a first indication of a site's degree of objectivity, they are not absolute. Commercial sites and blogs ending in .com are typically not objective. Governmental (.gov), professional (.org), and academic (.edu) sites typically are. The international organization that governs website addresses (ICANN) allows anybody to apply for new suffixes that can include nearly any word or phrase, complicating matters for those wanting to understand the author or source of a particular website. Always verify any information you find on the web with another credible source.

Here are a few digital sources you'll need for your speech-related projects to which you'll want to apply your information-literacy skills.

### **Websites**

Information on many websites is complete and legitimate, but bear in mind that the Internet is a playground for commercial and ideological interests of all kinds; anyone can build a website. Personal knowledge about a site and everyday common sense, while helpful, can only take you so far. The CRAAP test is especially helpful in assessing the credibility of any website you may want to use as a research source. See the “Speak Responsibly” box above for another helpful indicator for evaluating a website.

### **Search engines**

On average, 83 percent of college students begin an information search with a search engine such as Google, Yahoo!, or Bing.<sup>10</sup> Since commercial search engines are such popular tools, you should keep a few things in mind. First, research suggests that some Internet users confuse navigation—how they found a website—with the site's credibility.<sup>11</sup> The fact that a website shows up first on a reliable search engine may have more to do with complex, profit-driven algorithms<sup>12</sup> than with the credibility of the website. Many website owners seeking increased online attention, traffic, and consumer or user activity pay for-profit search engine companies (or hire a professional search engine optimizer) to ensure their website appears high up on any results list. The payment transaction can take various forms—paid placement, contextual advertising, pay-per-click—but the end result is the same: higher placement during a keyword search. These conspicuous placements can be helpful for the everyday research many people do when looking for travel bargains, but we require less biased, commercially focused information when researching for a speech. It's not always easy to figure out which results have been bought. Some results may indicate that they're “sponsored” (i.e., paid advertisements), whereas others may give no clue.



Again, as you read above, be sure to apply all five areas of the CRAAP test (Table 7.2) to any website you're considering for speech-related research.

Library websites are a good alternative to a commercial search engine. A multilevel evaluation process, in which librarians assess the database, the database managers rate the publications, and the publication editors evaluate the articles, ensures highly credible sources. Although a recent survey found college students reporting that commercial search engines trump library websites for speed, convenience, and ease of use, library websites came out on top in terms of trustworthiness and accuracy.<sup>13</sup> The size of your initial yield from a commercial search engine may be bigger, which seems to save time, but the CRAAP tests will often confirm that many of these sources aren't credible.

And don't forget your reference librarians. Isn't it preferable to let an information-literacy professional guide you early in your research process rather than rely on impersonal commercial search engine software? Put another way, unlike a commercial search engine, a librarian isn't directing you to sources with the aim of selling you something (whether it be a product, a service, or an idea).

## Wikipedia

If you're like 88 percent of college students,<sup>14</sup> you rely on Wikipedia, a popular online encyclopedia, especially at the beginning of your research process. That's understandable. Students report using Wikipedia because it<sup>15</sup>

- identifies and defines the topic's terms;
- uses clear English;
- provides background and overview (the "big picture") for a topic;
- lists many legitimate citations for sources that can then be located by searching scholarly databases;
- frequently includes pictures, timelines, and charts that help with visual learning;
- has a highly usable interface (highlighted links, relatively short entries); and
- uses an open-source functionality (defined below) that allows for updates and changes that can increase the accuracy of the information.

If these first four points sound familiar, it's because they match most of the research project goals outlined on page 142. Given that, it's no wonder people like Wikipedia.

Wikipedia merits much of its attention, but using it for anything beyond the early brainstorming stages to generate ideas and narrow your topic can be risky. Most significantly, it is an **open-source website (or "wiki")**, meaning that anyone is invited to create or edit most entries. Because millions of Wikipedia pages in many languages are not peer-reviewed or fact-checked, their reliability and credibility as sources for research are not necessarily reliable. While experts administer and control some pages (identified by a lock symbol), people with agendas put a slant on others.

Treat any Wikipedia entry with a critical eye. The bottom line is that, ultimately, you cannot identify or evaluate the "author" of Wikipedia content. The most credible Wikipedia entries provide external links and references that lead you to other resources, sometimes even primary ones—sources and authors, in other words, whose credibility can be confirmed. Bear in mind, however, that content on Wikipedia pages is often copied from other places on the web, and vice versa. This complicates your task of verification through



## SPEAK Responsibly

### The Evolving Experiment: Navigating Wikipedia

It's captivating to realize that as an information culture, we are in the middle of a huge and rapidly evolving experiment with open-source sites like Wikipedia. The conversation about Wikipedia's reliability is robust, with intriguing arguments on both sides. The company deserves credit for constantly working to increase the trustworthiness of its pages, and information-literate people pay attention to its many credibility indicators on the pages. While some believe that Wikipedia is already the premier source for many science and popular culture topics,<sup>16</sup> in the future, it may become the primary go-to resource for researchers of all kinds. But for now, and for as long as the reliability of its information and its authors remains in question, the rule of thumb is clear: don't use Wikipedia as your only or major source of information. Most instructors will not accept it as a reference in your bibliography, and citing it during your speech can weaken your credibility with listeners.

- Have you critically asked yourself how, why, and when you use Wikipedia?
- What conversations about Wikipedia are you having in your other courses?

cross-checking as the web makes it as easy to disseminate inaccurate data as correct data. Bad information may be replicated in several, even many, places. Always keep digging to locate the least-filtered sources.

### Online journal articles—the open-access question

The open-access movement has created confusion for some researchers seeking and viewing journal articles. While some in the scholarly community believe that their peer-reviewed work should be purchased by those wanting to read it, others—those believing in **open access**—consent to make their intellectual work available for free online.<sup>17</sup> The open-access movement is growing, leading to more scholarly work available for free each year.

Don't confuse the quality of free scholarly journal articles you may find through a commercial search engine like Google with those available only from a library database; they're probably equal. Your reference librarian or instructor can help you with any questions you may have.

### Social media

An increasing number of people are using social media like Facebook, Twitter, and LinkedIn. The jury is still out as to social media's role in the gathering and disseminating of research-worthy information, but it is a fascinating potential research source to watch, and signs are emerging that it may someday play a meaningful role. Social media is already being used to report on local events in real time, to track and communicate with subjects in medical research studies,<sup>18</sup> and to survey those within a social network about

knowledge, behavior, and opinions. Journalists, academics, business professionals, and others continue to discuss and debate social media's role on a variety of levels. APA and MLA, the organizations responsible for two of the most common academic citation styles for different source materials, are currently creating guidelines for citing social media,<sup>19</sup> but if you refer in a speech to something you saw on a social media site, you should say so (*On February 5, 2011, from the middle of the Egyptian protests in Tahrir Square, activist Wael Ghonim said in a Twitter feed that . . .*).

## 4. Assessing books

Like digital information, books are not all equal in terms of credibility. Use the CRAAP test to analyze any book you may want to use. Additionally, the University Libraries at the University of North Carolina offer several questions you can ask to determine a book's credibility:<sup>20</sup>

Consider the following questions about the *author* and the *publisher*:



- Is the author an expert in this field?
- Where is the author employed?
- What else has she or he written?
- Is the author associated with a group or organization that may stand to benefit from the research? (For example, does the author work for the pharmaceutical company that manufactures the drug she or he is testing?)

- 1 Book title
- 2 Author(s)
- 3 Publisher
- 4 City and/or state of publication
- 5 Publication year

- Is the publisher well-known? (Many self-publishing presses exist. Universities, museums, and other educational or research institutions are usually reliable publishers.)
- Does the publisher stand to benefit from the research or argument presented in the publication? (This may indicate bias.)

**figure 7.3 The Cover, Title Page, and Copyright Page from *Mastering Comics*, a Textbook on Creating Comics** A book's preface, introduction, and "About the author" pages are particularly useful for assessing credibility, and the CRAAP test is as effective in evaluating book content as website material. The provided questions can offer additional help in evaluating a book's credibility.

## 5. Assessing organizations

Using information from a trusted and well-known organization adds to the credibility of your material. If you incorporate data from an organization that is not well-known, be sure to research its mission thoroughly so that you can explain it to your listeners. Also, keep in mind that many (though not all) organizations are based on a particular ideology and/or have a political agenda. Though their information is usually trustworthy, it may be slanted in ways that support their ideological mission.

The name of an organization is another thing to consider. Some names, such as the Occupational Safety and Health Administration, clearly state the organization's mission and purpose. Other organizations have names that are not as revealing. For example, just what does the Goldwater Institute do? Further investigation reveals it to be a conservative public-policy organization funded by a private foundation and individuals that promotes policies supported by the late Senator Barry Goldwater. This may or may not be useful for your speech purpose, but the lesson is that you need to have a clear sense of the organization's aims. Research any organization before using its printed or online material in your presentation.

### Organizational Mission Clear from Name

- The American Medical Association—national consortium of medical doctors and students, whose aim is to promote public health
- Association of America's Public TV Stations—national nonprofit that advocates for noncommercial television

### Organizational Mission Not Apparent

- Discovery Institute's Center for Science and Culture—a nonprofit organization that advocates the teaching of anti-evolution beliefs
- The Industrial Workers of the World—an international union whose aim is to do away with capitalism

## 6. Assessing media

Numerous media outlets produce well-researched, unbiased, relevant news. Major media organizations like the *Detroit Free Press*, *CBS News*, and *CNN* continue to be, for the most part, trusted sources of information (though their opinions may be biased). Many newspapers are an especially good source when seeking local information.

The politicization of some forms of the news media, however, has made suspect even the once-revered journalist. It's not uncommon today to see critics (and entertainers) posing as journalists on television and in newspapers, magazines, and blogs. For example, how would you describe the professions of Jon Stewart, Glenn Beck, or Arianna Huffington? Media conglomeration is another thing to consider. In today's media marketplace, fewer people own more media outlets, concentrating control over what we see, hear, and read.<sup>21</sup> The need to please advertisers is another concern.

The Society of Professional Journalists, a professional organization (since 1909) “dedicated to the perpetuation of a free press as the cornerstone of our nation and our liberty,” says that true journalists have four ethical obligations, including freedom from

## SPEAK Responsibly

### In or Out of Context?

To support a point, people may take quotes, statistics, and other material out of their original context. If you come upon out-of-context research and pass it along to your audience, your own credibility may suffer. When examining a piece of research, ask yourself whether it seems as if there's "more to the story." For example, it may not be fair to call for reduced funding for College X "because of its low graduation rates." More research would tell you that many people enroll at College X to fulfill goals *other* than graduation, such as taking a class for a professional credential or personal fulfillment. Ethical standards require that you understand the context of your researched material to the best of your ability before you present it to listeners.

any interest other than the public's right to know and accountability to readers, listeners, viewers, and each other.<sup>22</sup> Many such journalists work in print, over the airwaves, and online; their information is credible. Your reference librarian or instructor can help you evaluate any media source you may want to use.

## 7D

## Cite Sources for Listener Comprehension

It's necessary to follow specific formats when citing research sources in your written work (see Section B in Chapter 10 for details). The conversational style preferred by public speakers, however, allows flexibility in citing sources during a presentation. Whereas a reader may benefit from knowing the complete URL or the volume, issue, date, and page of a certain source, listeners quickly become bogged down by such details. This doesn't mean that you shouldn't cite your research sources in a presentation. You should—always. You just cite them less formally and with more flexibility. Check with your instructor for classroom speaking as he or she may have additional guidelines and/or requirements for verbally citing sources.

### 1. How to cite verbally

#### Simplify the citation

Although you must cite some details about the research source, your listeners do not need (nor do they want) every bit of information. Refer to the "Holistic Dental Association website" instead of mentioning the "Holistic Dental Association website found at <http://www.holisticdental.org>, which I accessed last week on February 27." In your speech on

## create converse connect

### Take Time to Explain Your Citation

Because listeners hear your reference only once in real time, they must understand it well enough to make sense of it as a credible source on which you are standing. For instance, the *Washington Post*, *Time* magazine, and WebMD are popular enough that they need no explanation. Other sources need some or a lot of explanation:

- Tell your audience that the Museu Picasso, located in Barcelona, Spain, is dedicated to helping people understand the formative years of the artist Pablo Picasso.
- Explain that the American Association of Swine Veterinarians, based in Perry, Iowa, is an organization dedicated to swine health and production, with strong ties to the pork industry.
- Describe *Mother Jones* as an independent, nonprofit magazine committed to achieving social justice through investigative reporting since 1974.

Never assume that audiences will understand who or what your source is. When in doubt, take the time to fully explain.

Navajo rugs, mention that you got much of your information from “a classic 1997 publication called *A Guide to Navajo Weavings* by Native American art expert Kent McManis.” There is no need to cite the publication’s title, its subtitle, the name of its other three authors, its publisher, its date of publication, *and* the page on which you found the information. Of course, even though you do not verbalize these details, you must *know* them and have them available. Should an audience member ask for your specific citations after your presentation—and don’t assume no one will—you must be able to provide them.

On the other hand, beware also of oversimplifying the citation to the point where it’s unidentifiable. It’s not enough to say “according to the latest research” or “I read this article last week that said . . .” or “When I googled it, I discovered that . . .” You must provide *some* specific source information to enhance and maintain your credibility. At the very least, give your audience the name of the website or the name, title, and credentials of the author from a printed source.

### Limit the number of citations you mention

Even though you may have used eight sources for your speech, your listeners do not need to hear them all. Mention that you’ve looked at many sources, but cite only the two or three you relied on the most. Some speakers like to display digital images or show hard copies of their sources (such as a book) while mentioning them. Of course, if someone requires or requests a complete list of all your sources, you must make that available.

## Pronounce citation details correctly

Don't undermine your credibility by mispronouncing a citation. Practice to ensure a smooth mention of book titles like *Paradox and Perspicacity* ("pers-pi-KASS-ity"). Practice so that you can refer correctly to the journal titled *Archives of Gastroenterohepatology* ("gas-tro-en-TER-o-hep-a-TALL-ogy") and to names like Krosoczka ("crow-ZAHS-ka").

## 2. Where in the speech to cite

Speakers have flexibility for choosing when and where to cite their sources. For academic speaking, check with your instructor to see which of the following three options he or she prefers.

### Internal citations

The most popular option is similar to what you do when writing a paper—mention the research source as you use it during the presentation. Here's an example, in conversational form, from a speech on global efforts to combat malaria:<sup>23</sup>

*Mosquito nets are actually one of the oldest and still most effective ways to prevent malaria infection. I read an article in the July 2007 issue of National Geographic called "Bedlam in the Blood," and the author, a journalist named Michael Finkel, notes that the nets—when used correctly—have been shown to cut malaria infection by one-half and child deaths due to malaria by a third.*

Many speakers use this option because it helps distinguish between their own ideas and their borrowed ideas. Some ideas are so important to your message that you must highlight them with their own citations.

### Front-loading of your sources

Another option is to front-load your sources, or mention them in the introduction of your speech.

*I looked at several resources for this presentation. The two that provided the best information were Michael Finkel's "Bedlam in the Blood," from the July 2007 issue of National Geographic, and the website of Malaria No More, a nongovernmental organization based in New York City dedicated to ending malaria. The site has several reports and fact sheets that provided me lots of current information.*

If you front-load, you may not choose to mention specific sources within the body of the presentation. However, it's still absolutely necessary for you to know which source connects with which idea. Should an audience member, your instructor, or your supervisor ask about the connection between any idea and its source, it is your ethical responsibility to provide an answer.

## connect

For a sample student video that uses and cites research material, see the online student speech techniques video clip "Incorporating Researched Material to Support a Point."

Conversational internal citation

Introductory paragraph relays all sources up front.

Front-loading is more appropriate for an informative presentation than for other types of speeches. It assures your listeners that you are well prepared with credible sources. At the same time, front-loading can be more listener-friendly as it saves audience members the cumbersome task of processing numerous references, which can start to blend together after a while. Once you've mentioned your sources in the introduction, you can communicate your ideas, and your audience can sit back and interact with those ideas.

Front-loading is less effective for persuasive speeches. During persuasion, the quality and quantity of each of your sources are often tremendous assets in helping you achieve your communication goals. You want to ensure the connection of particular ideas with particular sources. Continue citing internally.

### A combination of front-loading and internal citations

A final option is to combine the first two options—front-load some or all of your sources, but make important individual citations during the presentation.

## Credible Source Citation in Action *A Student's Process*

Members of the campus Japanese Culture Club frequently gave talks to one another. Eli Van Der Zee, who had a deep fascination of the *katana*, or Japanese sword, offered to speak at next month's meeting. He planned to persuade listeners of the katana's rightful place in history and its current positive reputation among Japanese enthusiasts.

Eli already knew a lot about the katana, but he wanted to use some highly credible sources to convince his listeners to value it like he did. After a few hours of research, he was able to identify three key sources.

While all three sources passed the CRAAP test to Eli's satisfaction, he realized his bigger

challenge was that he would have to spend some time explaining the sources to his listeners so they, too, would see them as highly relevant and reliable sources. How could he describe each citation conversationally in a way that each would make sense to his listeners as a credible source? With that question in mind, he brainstormed a plan for how he would introduce them, which combined front-loading with internal citations:

*Three main sources for katana speech:*

1. *Secrets of the Samurai Sword*, a 2008 film shown on the PBS science TV show *NOVA*
2. *The Connoisseur's Book of Japanese Swords*, a 1998 book by Kokan Nagayama published by Kadansha USA
3. *The Nihonto Message Board*, dedicated to the study of Japanese swords and fittings, <http://www.militaria.co.za/nmb/>



*Katana Speech: Strategies for Verbal Source Citation*

1. I'll mention the NOVA film in the introduction. I think most people have heard of NOVA, but just in case, I'll describe it as "a multiple award-winning science television series produced at WGBH in Boston that's aired on PBS in the states and in over 100 other countries."
2. My guess is that no one's heard of the Nagayama book, but it contains key information that informs multiple spots in the speech, so I'll need to work hard to make it stand out. I'll refer to it several times throughout the presentation, but the first time I'll introduce it by title and, to emphasize its significance and credibility as a supporting source, I'll explain that it's "a comprehensive and clearly written guide of Japanese swords that's a must-have for true connoisseurs. It was written in 1998 by Kokan Nagayama, a famed Japanese sword polisher, competition judge, and instructor. The book was translated into English by Kenji Mishina, another sword polishing instructor, who's worked at the British Museum and writes frequently about Japanese swords."
3. My final source is the online discussion board. This is such a niche source that I doubt anyone's heard of it, so I'll need to explain why it matters and is useful as a source reference. When I refer to it, I'll tell them that Nihonto is "a highly active online discussion board that's dedicated to the study and preservation of Japanese swords and fittings. It offers links to other websites, clubs and societies, and books. It's used a lot by enthusiasts like myself."

Source #1:  
Popular TV show that listeners are familiar with to be verbally referenced in speech introduction

Source #2:  
Obscure source to be verbally referenced in greater detail and in multiple places to emphasize its credibility

Source #3:  
On-line discussion board source relevance to be explained later in the speech after foundation has been laid with the other two sources

**review questions**

1. What mind-set is helpful to adopt prior to beginning any research? What skills should you have before starting your research?
2. Other than the web, what are some sources available for researching your speech?
3. Why is it important to assess the credibility of a research source? What is information literacy? Why is it an essential skill for modern researchers?
4. How should sources be cited in your speech? How does this differ from citing sources in written work?

**key terms**

primary research 146  
secondary research 146  
search engine 147  
keyword search 147  
invisible web 147  
virtual library 148

database 148  
abstracts 148  
discussion group 148  
blog 149  
peer-reviewed article 149

Freedom of Information  
Act 152  
information literacy 155  
open-source website  
(or “wiki”) 161  
open access 162

**connect**

For online exercises, quizzes, and hands-on activities, see the Chapter 7 assignments in Connect Public Speaking.

**exercises**

1. Split the class into several small groups, and send each to a different part of your campus library. Have each group find at least three databases, reference materials, or research services they weren't aware of before. Ask a librarian or staff member for more information about what you find. As each group reports its findings to the rest of the class, have someone create a master list of them for everyone to share at the end of the class.
2. As a class, choose a narrowed topic you'd all like to know more about. Assess what most people already know about the topic, and decide on the relevant information you would need to research for a twenty-minute presentation to the class.
3. Choose a topic and find a website you might use for researching it. Evaluate the site according to the CRAAP test on page 157. Share your analysis with your classmates.
4. Watch a speech on video, or attend a speech on campus. Choose one whose title suggests that the speaker has done some research. Analyze the connection between how (or whether) the speaker cites research and the speaker's credibility.