The pedagogical lessons of Chapter 5 aim to help students with the challenging process of locating and evaluating research materials. To that end, Chapter 5 teaches students how to find sources online and in libraries, understand the differences between primary and secondary sources, evaluate print and electronic sources, and try out field research. The chapter ends with lessons on writing an annotated bibliography and note taking.

**PEDAGOGICAL PRACTICE: BEGIN WITH THE CHAPTER PREVIEW QUESTIONS**

In order to get a sense of your students’ familiarity with the research process, ask them to complete the Chapter Preview Questions in their research logs. You might find that students voice dismay at the tough job of finding research sources, and that they view locating and evaluating useful research materials as extremely frustrating and time-consuming. Students may not even want to use the library because it is so easy to search Google, and they might have come away from the library in the past feeling that there just isn’t anything there on their topics. Alternately, they might often settle for the first sources they come upon, regardless of the fact that they might be inappropriate for academic level discourse or only marginally related to their topic. Discussing the students’ answers to the preview questions can help bring out research blocks and fears. We often tell students they will develop confidence as university or college researchers by working through the lessons of Chapter 5.
TEACHING THE CHAPTER’S OPENING IMAGE: CLIMATE CHANGE MAGAZINE COVERS

Chapter 5 offers magazine covers that depict different stances on the topic of global warming to get students started thinking about the ways different sources provide quite distinct perspectives on or information about the same topic. Discuss with students how these images can be seen as offering two “voices” on climate change, or acting “in conversation” with each other. The theme of the conversation of research extends through the chapter (see page 133). By simply surveying the types of covers of a range of any given publication, students can get a sense of the publication’s target audience (returning to the lesson on rhetorical situations from Chapter 1), the stance of the argument, and, ultimately, the usefulness of the source for their research projects.

WORKING WITH THE CREATIVE PRACTICE: ANALYZING COVERS

If you are working in a high-technology classroom, you can have students perform the collective design for a new magazine cover working with magazine covers found on the Envision Website (see Student Resources/Chapter 5/Handouts, Exercises, and Assignments/Creative Practice: Looking at Magazine Covers at http://www.pearsonhighered.com/envision). If you are in a low-technology classroom, you can bring in back issues of magazines, or ask students to pick another timely topic and repeat the activity with that new focus.

Writing Activity for Visualizing Research

The pressure to create an “original” thesis often results in procrastination and writer’s block. This feeling is compounded when students feel that their topic is a familiar one already steeped in academic discourse. Since many of our students experience anxiety when faced with the task of research, we ask them to open their books to page 134 and study the Iceberg of Research in Figure 5.4. We tell them that their future paper will appear “above the water,” building on previous people’s research. As a writing activity, we have students draw a similar iceberg and then, as they locate sources while working through the chapter, they write in names and titles of specific pieces for each of the categories on the iceberg. In essence, that is a
visual version of a working bibliography, but it demonstrates to students that there is space for their contribution, building on the work of others.

**Writing Activity for Developing Search Terms**

Searching for sources can be confusing and time-consuming. Most students today don’t realize that the importance of search terms, and how not having the correct ones for a topic can make it seem like “there is nothing on the topic.” Take time to read out loud the At a Glance box from page 136 on Tips for Using Search Terms and have students list several potential search terms in their research logs (introduced in Chapter 4). In a high-technology classroom, consider asking students to work on their research logs in class. They can surf online databases like Google Scholar or their campus library and write up entries in an online research log or research blog.

**Teaching Primary and Secondary Sources**

Students often have trouble with the distinction between primary and secondary sources. A simple way to explain the difference between primary and secondary sources is to have students think of primary sources as what they will look at or explore, and secondary sources as the lens, or series of lenses through which they will examine their primary materials—in other words how they will explore. The choice between what to use as a primary source and what to use as a secondary source will determine, to a certain degree, the direction of your students’ research.

**PEDAGOGICAL PRACTICE: PRIMARY AND SECONDARY SOURCES**

Even though online searching can yield a great deal of results in very little time, remind students to check their library for sources that might not show up on an Internet search. We often set up a class meeting with a librarian to help students find appropriate search terms and academic journals for their topics. We also emphasize that researchers need to allocate a large amount of time for searching, locating, and evaluating materials. Finally, we have our students use the At a Glance box on Primary and Secondary Sources from page 137 as a way to help them fill in their personalized icebergs of research (see Figure 5.4).
WRITING ACTIVITY FOR SEARCHING FOR SECONDARY SOURCES

Send your students on a mini library assignment. Have them transcribe the At a Glance box on Using One Source to Locate Additional Sources from page 140 into their research logs and follow the directions listed there to build the iceberg of research for their projects. When we assign this activity, we ask all students to write up their findings and report back at the next class meeting.

WRITING ACTIVITY FOR RECORDING SEARCHES IN YOUR RESEARCH LOG

The At a Glance box on Recording Searches in Your Research Log on page 141 can be assigned as a graded component of the research project. This will help students get into the practice of keeping meticulous track of their sources. Especially useful is the tip that students print out Web pages or download them because their content often changes when they are updated. In recording their entries, students might consult Vivian Chang’s research log or others on the Envision Website (http://www.pearsonhighered.com/envision/141).

Teaching Evaluating Your Sources

Our students were raised in the digital age, which means that working with the Web comes naturally for many of them. In fact, the Web is probably the first place they will turn for information, rather than the library. Many instructors, by contrast, will remember a time before the Internet and might be skeptical of the quality of sources found on the Web. Chapter 5 hopes to bridge this gap by offering strategies for helping students to evaluate their collection of primary and secondary research sources—whether those are Internet or print-based sources. The chapter uses topic of stem cell research as a focal point, and walks students through an analysis of the visual and verbal rhetoric of a Web pages as well as academic journal covers. You can repeat this instruction in Evaluating Sources with the topic most appropriate for your class. Use the Envision Website to locate Internet articles, Websites, and print texts around your topic.


**Writing Activity for the At a Glance box on Evaluating Websites**

In order to understand the reliability of Internet sources, have your students work in groups answering the questions in the At a Glance box on page 143 for a series of Web pages, all addressing the same topic.

*Technology Tip:* If you are in a low-technology classroom you can bring printed Web pages to class. You might also assign this exercise as homework and have students print at least three different Web pages that address their topic and bring them to class for evaluation.

**Teaching Evaluating Library and Database Sources**

While bias and rhetorical stance might be somewhat easy for students to identify on Web pages, evaluating academic sources is more complicated by the simple fact that students often feel unqualified to evaluate the work of professionally revered journals and publications. They might feel that they don’t know enough yet about the topic to comment on what an expert has to say. To remedy this, have your students conduct a visual and verbal analysis of the journal covers in Figures 5.9–5.10, relying on the lessons in visual literacy they learned from Chapters 1–4 of *Envision*. Next, ask them to complete the At a Glance box on page 148 on Evaluating Academic Sources. When we teach this chapter, we often require students to bring to class 3–5 hard copy books or journal articles (not printed from the Web) and write out the answers to the evaluation questions in their research logs, then share their results in pairs. For a more interactive class, we as instructors read out the bullet points from that At a Glance box and then have students discuss their answers with each other in pairs. At this point in their research, students will probably come upon scholars who reference or disagree with one another. These disagreements or different perspectives can also serve as useful ways for students to understand an academic author’s point of view if they feel otherwise unqualified to do so.

**Writing Activity for Field Research**

Whether or not field research is applicable for your students’ projects, students should be aware that field research (interviews and surveys) often adds excitement and depth to research projects. After studying the instruction about field research...
on pages 147–150, have students write a letter to Vincent Chen and ask him several questions about his photo in Figure 5.11 from the 2009 Copenhagen Climate Conference. They should consult Sean Bruich’s letter as a model of field research from the Envision Website (http://www.pearsonhighered.com/envision/150) and emulate their writing strategies after Sean’s example. Then, after peer reviewing their letters, they should write a second letter, this time to a person (faculty member, community leader, or other research lead) asking for materials and a request for a meeting—whatever will help their research along.

**TEACHING CONDUCTING INTERVIEWS AND SURVEYS**

The At a Glance box about Conducting Interviews and Surveys on page 151 offers concrete ways for students to use field research for their own projects. Have the class read this list out loud and then ask students to use their imagination and think of whom they might interview if they could have access to top people in their field. Have students work through the At a Glance pointers for conducting interviews and surveys and compose a written plan for field research in their research logs. They can share their plan of action with others at the end of the exercise. You can also have students draft interview questions and role play interviews in class to help them evaluate the importance of preparation, the careful composition of questions, and a polished interview style.

**Writing Activity for Creating a Dialogue with Your Sources**

Returning to the metaphor of the conversation, the dialogue of sources writing activity allows students to conceptualize how they can acknowledge the work of others and yet offer an original contribution. Encouraging students to think of the process of research as listening in on an ongoing conversation and the process of drafting a research paper as adding their own voice to it can often alleviate some anxiety. Once students amass a range of sources for their projects, they can begin to think about putting their sources in conversation with one another. This process allows students to choose the arguments that work best in the service of their research and in conversation with the other sources. Review the model Dialogues of Sources in Envision (pages 152–155) as well as on the Envision Website (http://www.pearsonhighered.com/envision/152). Prompt students to arrange a
fictional conversation between their sources to help them see how they will find their own voice among the many voices of their sources. You might consider assigning part of the research project grade to this writing activity, and asking students to use the steps in the At a Glance box on page 153 as prewriting. This will help them prepare a list of key players and key issues that might appear in the paragraphs of their research papers.

**Pedagogical Practice: Annotated Bibliographies**

We find it useful for students to assign annotated bibliographies as part of the research project. Annotated bibliographies help students organize their research and get started writing short summary annotations on each of their sources. Our students like to get creative, including screenshots of the covers of their books or photos of interviewees, much as Carly Greehr included visuals for her annotated bibliography in Figure 5.13. The Envision Website offers many more examples at http://www.pearsonhighered.com/envision/155, as well as detailed instructions and peer review forms (see Student Resources/Chapter 5/Handouts, Exercises, and Assignments/Writing Projects at http://www.pearsonhighered.com/envision).

After students complete the annotated bibliography, you can have them convey the content in a fun manner by staging “introductions” as if students were introducing their authors to the rest of the class on a TV show such as Oprah or Jon Stewart.

**Teaching the Writer’s Process**

Ask students to consult the At a Glance box on Note-Taking Strategies from page 157 as they head into reading their research sources. Careful notes now will make for stronger papers later and help students avoid unintentional plagiarism (covered in Chapter 7).
BREAKING THE CHAPTER INTO DAYS OF THE WEEK

DAY ONE (READ 131–141)
Have students discuss the Chapter Preview Questions and the differences between Figures 5.1–5.2. Then, they can complete the Creative Practice on pages 132–133. Have students write in potential sources for their own “Iceberg of Research” (see Figure 5.4) and complete the writing activity on Developing Search terms using the At a Glance box on page 136. Discuss the differences between primary and secondary sources and have students work on finding and logging both types of sources in their research logs. Assign them a mini-library visit to find Secondary Sources and have them write answers to the At a Glance boxes from pages 140 and 141 in their research logs.

DAY TWO (PAGES 142–151)
Ask students to bring 3–5 print sources to class along with their research logs. Assign peer review groups and have them complete the At a Glance box on 148 of their print sources. Then, ask them to focus on evaluating Web sources, using the questions in the At a Glance box on page 143 as a guide. Turning to field research, ask students to work in teams to complete the Pedagogical Practice above, writing a letter to Vincent Chen in emulation of Sean Bruich’s model field research letter. They should brainstorm additional field research sources for each other’s projects, turning to the At a Glance box on page 151 as a resource.

DAY THREE (PAGES 152–159)
Have begin to have a conversation with their sources by creating an imaginary dialogue based on the student writing from pages 153–155 and the samples on the Envision Website. Then, following the instructions from the At a Glance box on page 153, they should write their own dialogues and peer review them with each other. For an alternative strategy, ask students to write an annotated bibliography first, and then complete the dialogue of sources. Sometimes, we walk students through the writing of one entry in class or the beginning of the dialogue of sources and then assign the rest for homework.
ONLINE RESOURCES FOR CHAPTER 5

At a Glance: Chapter 5 on the Envision Website

<table>
<thead>
<tr>
<th>Resources and Readings</th>
<th>Exercises and Assignments</th>
<th>Student Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Magazine database</td>
<td>• Interactive source-finding exercises</td>
<td>• Research Log entries</td>
</tr>
<tr>
<td>• Articles on covers and contents</td>
<td>• Research Log entries</td>
<td>• Dialogue of Sources</td>
</tr>
<tr>
<td>• Focus on scientific writing and climate change</td>
<td>• Directions for note-taking</td>
<td>• Annotated Bibliographies</td>
</tr>
<tr>
<td>• Resources for field research</td>
<td>• Dialogue of Sources</td>
<td>• Visual Annotated Bibs</td>
</tr>
<tr>
<td>• Focus on diverse learners and students with disabilities</td>
<td>• Annotated Bibliography</td>
<td>• Models of Field Research: letters, request for interviews, survey data</td>
</tr>
<tr>
<td></td>
<td>• Peer Review Sheets for Writing Projects</td>
<td>• Student work in progress</td>
</tr>
</tbody>
</table>

MyCompLab Resources for Chapter 5

1. **Conducting Online Keyword Searches**: visual demonstration on using keyword searches. Find at Resources > Research > The Research Assignment > Finding Sources > Multimedia > Writing in Action: Conducting Online Keyword searches

2. **Understanding and Finding Source Material**: more instruction on finding sources. Find at Resources > Research > The Research Assignment > Finding Sources > Instruction > Understanding and Finding Source Material

VISIT

http://www.pearsonhighered.com/envision for expanded assignment guidelines and student projects.
http://www.mycomplab.com for additional general writing and research resources.