Module 9
Teaching students to conduct research and evaluate sources

Challenges

Many students enter college without experience in conducting research and working with sources at the college level. If they have written research papers in the past, the guidelines for these assignments were probably less rigorous than the demands of college research assignments, and students may not have ventured beyond a quick search on the Web. You will likely encounter the following challenges when you give research assignments:

- Students don’t know how to pose a research question; research to them is an accumulation of information rather than evidence to support their own arguments.
- Students use only Internet search engines like Google to find sources for their projects.
- Students are unfamiliar with or even intimidated by the search tools and resources at the library, including online databases.
- Students don’t have practice evaluating sources and thus are not able to distinguish between credible and unreliable sources.
- Students do not recognize bias in the sources they find.

Strategies

Students can benefit from guided exercises and tutorials that provide them with authentic, hands-on research experience. The following strategies can help you guide students through the process of finding, evaluating, and documenting sources:

1. Introduce students to the resources available at your school and show them how to search online databases. If possible, enlist the help of a reference librarian. Be willing to spend an entire class period to orient students.
2. Review the handbook’s discussion of evaluating sources, including the checklists “Evaluating all sources” and “Evaluating Web sources.” Using a common source, go through the appropriate checklist as a class.

3. Practice information gathering in a real-life scenario. For example, provide a sample thesis and ask students to locate a reliable electronic source. Have students explain how the source might support the sample thesis.

4. Practice creating sample works cited entries (or end citations) together. Help students navigate the handbook’s citation directories and models.

5. Assign annotated bibliographies, which require students to find sources to support their argument, evaluate the sources in writing, and create an appropriate works cited list, references list, or bibliography. The sample lesson provides specific guidelines for applying this strategy.

Sample lesson for Strategy 5: Annotated bibliography

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### Lesson steps:

#### Preparation:

1. Guide students through the process of choosing a topic and a research question for your assignment. Assignments will vary depending on the goals of your course and department. The annotated bibliography can be used as a preliminary step toward a more extensive research paper, or it can serve as the final product of each student’s research.

2. If possible, take a tour of your school’s library or ask a librarian to introduce the search tools available on your campus. Many first-year and even second-year students will need help accessing academic articles through online databases. For background reading, assign your handbook’s coverage of finding and evaluating sources. Let students know that they can turn to you, the librarian, and their handbook for help with understanding what constitutes a scholarly or an academic source.

3. After students have learned about your library system’s search tools, ask them to bring three to five scholarly sources on their research topic to Session 1. In preparation, have them review your handbook’s coverage of evaluating sources.

#### Session 1:

1. Discuss the handbook’s coverage of evaluating sources, pointing out questions that students can ask to determine whether their sources are scholarly and credible. Focus on questions that can help students evaluate any source.

   **Assessing an argument**
   - What is the author's central claim or thesis?
   - How does the author support this claim — with relevant and sufficient evidence or only with anecdotes or emotional examples?
   - Are statistics consistent with those you encounter in other sources? Have they been used fairly? Does the author explain where the statistics come from?
   - Are any of the author's assumptions questionable?
   - Does the author consider opposing arguments and refute them persuasively?
   - Does the author fall prey to any logical fallacies?

   **Checking for signs of bias**
   - Does the author or publisher endorse political or religious views that could influence the argument?
   - Is the author or publisher associated with a special-interest group, such as Greenpeace or the National Rifle Association, that might present only one side of an issue?
   - Are alternative views presented and addressed? How fairly does the author treat opposing views?
   - Does the author’s language show signs of bias?

2. If your students will be conducting research on the Web, guide them to specific questions they should ask to evaluate Web sources, including those about **authorship, sponsorship, purpose and audience, and currency** discussed in your handbook. Remind students that if an article’s authorship and sponsorship are unknown, the source might not be credible or scholarly.
### Session 1, continued:

2. If your students will be conducting research on the Web, guide them to specific questions they should ask to evaluate Web sources, including those about authorship, sponsorship, purpose and audience, and currency discussed in your handbook. Remind students that if an article’s authorship and sponsorship are unknown, the source might not be credible or scholarly.

3. Have a willing student share his or her research question and purpose and describe a sample source. Ask the student to provide basic information about the search process and source text:
   - How was the search performed (for example, with a Google search, with the library’s online databases)?
   - What is the title of the text?
   - Who is the author? Does the author have any credentials?

4. With the help of the class, discuss the credibility of the source. Even though students will not have read the source, they should still be able to determine whether the source warrants further reading or is unsuitable for inclusion in the research project. Consider discussing answers to the following questions:
   - Was the student’s search process likely to turn up scholarly sources?
   - Does the title seem to be scholarly?
   - Do the author’s credentials qualify him or her to write on the topic?

5. Divide students into small groups (three or four students each) to evaluate the sources they have brought to class. Encourage them to follow the same process you used in evaluating the sample document and to use the handbook’s guidelines for evaluating sources. Offer guidance to students who disagree about the credibility of a source or who have additional questions. If students discover that some of their sources are not credible or appropriate, let them know that they still have time to find other sources to include in their projects.

6. For homework, ask students to replace any sources their group rejected as not credible or not scholarly. To begin working on their annotated bibliographies, students should bring to Session 2 the bibliographic information for all sources they are considering.

### Session 2:

1. Begin this session by explaining the purpose of the annotated bibliography assignment: to provide students with authentic practice conducting college-level research, to help them learn about a topic of their choice, to help them practice summarizing sources, to help them figure out how sources relate to their topic and their own position, and to give them experience with evaluating and documenting the sources they find. If you plan to use the annotated bibliography as a preliminary step in a larger research project, you can also explain that this assignment will help them manage both their time and their information as they begin their research.

2. Distribute or project a sample entry from an annotated bibliography and introduce its parts: the citation and the annotation. The annotation may take many forms, so you will need to specify what each entry should include. Usually three to seven sentences long, annotations often include one or more of the following points, depending on your course context and assignment goals:
   - A brief summary of the source
   - An analysis or evaluation that identifies biases, explains how the source fits within the field, or compares the source to the others in the bibliography
   - An explanation of the source’s function in the research project
| Session 2, continued: | 3. Ask a willing student to share a sample source. Using the handbook as a guide, work with the class to create an end citation for the source. Students may need help navigating the MLA, APA, or Chicago style section of the handbook and identifying the source type and corresponding citation model. Many students won’t recognize the difference between a Web site and an article posted on a Web site, for example, and will need specific guidance. |
| | 4. Work with students to write a sample annotation. Ask the student who contributed the source to provide general information about the text for the class to work from. |
| | 5. After the students have constructed a model citation and annotation, give them time to draft an annotated citation for one of their own sources. (Some students will finish more quickly than others; ask these students to continue drafting citations and annotations for their other sources.) |
| | 6. After about ten minutes, ask students to share one of their annotations with one or more peers and to note strengths in the samples of their peers. |
| | 7. Before the class period ends, ask a few students to comment on the strengths they noticed in their peers' work. With the writers' permission, share a few particularly strong annotations with the class. (Some writers may be shy about reading their own work. You can ask another student to read the entry aloud, or you can offer to read it to the class.) |
| | 8. Wrap up by summarizing the features of an annotated bibliography and the strengths of the samples noted in class. Assign a draft of the annotated bibliography for homework. |

| Follow-up: | Conduct peer reviews of full annotated bibliographies. You can devote an entire class period to the peer review, or you can ask students to share a few entries during one segment of the class period. |

| Variations: | If your school has such resources, consider reserving a computer classroom for Session 1 so that students have access to online sources and other materials in class. |