Core Competencies:

- Recognize the need for information and define a research topic by:
  - Articulating a research question, problem, or issue.
  - Obtaining background information to identify and define key concepts and terminology related to topics.
  - Defining a manageable focus and timeline for the project.
  - Identifying the types of materials that are appropriate for the project.

- Develop and implement an effective search strategy appropriate for an information need by:
  - Differentiating among various types of information sources (specialized encyclopedias, article databases, library catalogs, search engines, etc.) and the purpose of each.
  - Choosing and accessing appropriate information sources for the research question.
  - Identifying search terms appropriate to the research tool and the topic.

- Locate and retrieve information by:
  - Interpreting citations accurately.
  - Recognizing key elements of call numbers and URLs, and using them to locate library materials and Web sites.

- Assess the research strategy by:
  - Determining whether the information retrieved is relevant and sufficient for the project.
  - Analyzing success and failures, revising research topics, and trying different techniques and research tools as needed.

- Organize, synthesize, and communicate information by:
  - Integrating information from a variety of sources appropriate to the research question.

Preparation:

Get copies of the Research Strategies handout. For this workshop, the exercises are incorporated into the handout. Tell students that their participation in the workshop is part of what determines their “credit” for attendance at the workshop. The exercise “worksheet” will be collected at the end of the workshop.

Workshop Outline:

Ice-breaker and agenda: Begin by asking students to do the following: “Think of words that describe how you feel when you first get a research assignment? It can be a long term paper, or a brief assignment that requires you to support your work with just a few sources of information. What word describes the feeling you have?”

Record student responses on the white board. They often come up with words like: overwhelmed, inadequate, confused, nervous, etc.

Tell students: “Years of research (by Carol Kuhlthau et al) based on interviews with high school and college students have confirmed two things: 1. These negative feelings you have about doing research are shared by most students; you are not alone, and 2. These feelings are based on uncertainty in the face of having to make decisions about the research process (e.g. when and where to begin, what is a good research topic or thesis, where to find good resources, where to get help, etc.)”

“This workshop will attempt to help you organize the research process into a more manageable, systematic process that won’t be so overwhelming.” I always encourage students to interrupt with questions and comments. (5 min.)

IMPORTANT NOTE: At each step give students time to accomplish the task and move around the room to consult with them and make sure they are on task. And take the time to get them to discuss each step.
Glendale College Library Workshop
Research Strategies – Outline

1. **Identify the details of the assignment**: Make sure that students understand their research assignment and what is expected of them. Emphasize that this is an important step in the research process. Go over number 1 on the handout and explain why it is important to think about and understand the parameters of the assignment before beginning to do research. Ask: “Will you be writing and opinion paper, or a persuasive essay? What kinds of resources do you think will be appropriate; blog postings, peer-reviewed journal articles?” All these things make a difference when it comes to research. Remind students that if they are unclear on what is expected of them, they should discuss with instructor. (4 min.)

2. **What is your topic?** Choosing a topic can be one of the most difficult parts of the research process. Tell students that it is important to find something that they can make into an interesting essay/paper. Sometimes instructors give a broad topic and ask students to focus on some aspect of that broad subject. Sometimes instructors leave the topic entirely up to the student. If the choice is open, advise students to pick the thing they are most interested in, the most passionate about, and the thing they would most like to learn a lot more about. That will make the research process fun instead of drudgery. Remind students that if they are unclear on what is expected of them, they should discuss with instructor. (4 min.)

3. **What is the research topic under investigation?** This is where students should start filling out the worksheet. Explain to them: “You may not know what your exact thesis statement will be; it may change throughout the process, but you need to start with an idea of what you want to write about. State what it is you are setting out to prove or disprove in your paper. Keep the statement simple, straightforward, and take a definite stand”. Demonstrate these steps using the example below—or choose another of your own. (5 min.)

   **Primary topic:** video games

   **Additional related topic/s:**
   - violent behavior
   - young males

   **Your statement might be:** “Video game playing is causing an increase in violence among young men.”

   Give students a few minutes to come up with their own research statements and write them down in the form of a sentence.

   **NOTE:** Tell students if they don’t have a research assignment in one of their classes, and can’t think of an interesting example, they can use one of the topics on the online materials web page for this workshop.

4. **Extract the keywords**, or main concepts, from the sentence and list them on the handout (#4). This shouldn’t take long, but give students a little time and walk around to offer consultation to anyone having difficulty. (3 min.)

5. **Find synonyms** and related terms for each of the key words you’ve identified. Tell students to go to [www.dictionary.com](http://www.dictionary.com) OR [www.thesaurus.com](http://www.thesaurus.com) OR [www.kwmap.net](http://www.kwmap.net) for help finding synonyms and related terms; then record them on the handout/worksheet (#5). Students might need a bit more time for this. (5-6 min.)

Example:

**Line A:**
- video games
- violence
- young men

**Synonyms/related terms might be:**

**Line B:**
- computer games
- violent behavior
- male teenagers

**Line C:**
- first person shooters
- aggression
- adolescent males
6. **Now, based on the topic, it’s time to choose a database.** Show students the list of databases and where to find descriptions of the databases and think about their topic and which database might have the kind of information they’re looking for. Also mention that ProQuest is appropriate for just about any search because it is huge and has very broad coverage. Begin a demo search of the video game topic in ProQuest. (5 min.)

7. **The Search:** When I get to the Advanced search on the ProQuest interface, rather than explaining Boolean logic to students (I don’t think there’s time, nor is this the high priority for such a general workshop), I recommend simply stressing to students that they don’t want to put all their search terms in the first search box. You might say: “We don’t realize it, but there’s an invisible **AND** between every word in a Google search. Here in ProQuest it’s more apparent.” I really think this is enough for them to grasp at this point.

If you are intent on teaching Boolean logic at this point and you have the time, you might try this get-up-and-move-around exercise with students in order to demonstrate the function of Boolean operators:

<table>
<thead>
<tr>
<th>Everyone who is enrolled in English 101 OR English 120 OR ESL 151 please stand up. (This is usually most of the class, illustrating how broad and inclusive the OR operator functions.) Now you may sit down.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next, everyone who is enrolled in English 101 <strong>AND</strong> Math 101 please stand up. (This is far fewer students, illustrating how the AND operator is much more specific and exclusive and narrows a search.) Now you may sit down.</td>
</tr>
<tr>
<td>Finally, everyone who is enrolled in an English course which is <strong>NOT</strong> English 101, please stand up. (This illustrates how the NOT operator can exclude extraneous information.) Students may sit.</td>
</tr>
</tbody>
</table>

Continue your demo search. Keep it brief, but try to include the most important features of the ProQuest interface. Be sure to demonstrate scanning the results list and revising the search by using different terms. (6-7 min.)

8. **Student search:** Instruct students to use their topics and the terms they have written down to perform two searches. “For the first one use your original keywords (line A from the worksheet). Once you have your list of articles, skim the list to see the general tone of the articles. Now do a second search using your synonyms (line B and/or C from the worksheet). Again, skim through this list of results. Are the articles different? If yes, are they different in a major or subtle way? If you have time left, do a third search and this time be creative, maybe using words you discovered looking at your search results list. Finally, find one article that you like and think would be a good credible source for your research topic and email it to yourself.” Remind students that it is often necessary to revise your research question based on the results of different searches. Ask a few volunteers to discuss their searches. As they present, you can emphasize important features that they’ve discovered (ex: It’s great that you discovered the “cite this” feature; it’s really useful), as well as fill in gaps. (15-20 min.)

9. **Go over #9 on the worksheet:** Encourage students to keep track of their research process so they won’t have to repeat steps. With catalog searching, web searching, and database searching, the process becomes quite complex. (2-3 min.)

10. **Finally, spend a bit of time discussing #10 on the worksheet.** Show students the Citing Sources link on the library’s home page pointing out where they can find guides to the various style guides. (5-6 min.)

Be sure to close by reminding students to consult with a reference librarian whenever necessary—e-mail, phone, or in person.