It seems inevitable. During library instruction sessions with my university students, their response to my question “When you need to find information, where do you go?” The typical answer is “The Internet.” In fact, during one freshman library session, over 95% of the students answered the question this way. I have come to expect this answer, yet I know the Internet is not the ideal resource that students often assume it is. The Internet has the potential to be a valuable research tool, but it does not provide across-the-board quality.

What’s In, What’s Out?
Information Seeking Strategies asks us to begin by considering all possible sources of information (Big6, 2.1). One goal of library instruction is to introduce students to the library’s resources and help them understand how to do research. When I am working with students on a specific assignment, we usually begin by considering the boundaries of the assignment and any resources the instructor has specified that students should or should not use. However, the student does not always know what the professor will allow, or what the requirements of the assignment are. This is usually an indication that the student was not listening carefully when the assignment was given or lacks complete information.

More worrisome still, is when students too strictly define the “types” of information they can use. For instance, some students believe that when a professor tells them they are not allowed to use an Internet resource, that means they are not allowed to use online databases to find journal articles. This is not true, as even though a database is accessed through the Internet, it is not considered an Internet resource. I often find myself staging “interventions” to help students understand the difference between an Internet resource - such as a web page - and an online tool like a database.

Digging In
Once students have defined their range of resources, it is time to turn to Location and Access (Big6, 3.0). Access can sometimes be the hardest part of the research sequence for my students, as they often do not know how to find what they want, particularly when they are faced with our more complex search tools. Just as there are steps to the Big6, there are steps that can make it easier to locate and access materials.

In library instruction I focus on what I call the “research formula.” The research formula is very similar to the steps to information problem solving as outlined in Big6. The steps to research begin after the student has identified his or her topic.

After the student knows what he or she needs, he or she needs to know where to find it. When I am working with students, I have them begin with the resources in the library. I teach my students the first stop for finding information resources is to use the online card catalog to find books on their topic. There are many search strategies to be employed here -- a basic search of the catalog, use of different keywords to provide extra resources, and browsing the shelves for books of a similar nature. With any luck, this should start to ring a bell with some students. I hope they recognize that many of the same skills they employ for searching the Internet such as searching similar terms and “surfing” links for related content have their basis in library research. This is Big6 - the same information skills that serve us in the academic context, serve us in informal research and all areas of life!

Another important research formula strategy is the use of call numbers and library classification systems. Many of my students are familiar with the Dewey Decimal System from their school library media center. Our university, like most academic libraries, uses the Library of Congress (LC) classification system. Learning a new system of locating the books using LC can take some time. I usually illustrate the difference between LC and Dewey by comparing dark chocolate to milk chocolate - they look very different, but the ingredients are similar. I then tell students LC and Dewey use the same type of system to classify books, just use different order of the letter/number sequence. After this discussion, I pass the bowl of milk and dark chocolates to reinforce the lesson.

As we move along the research formula, I encourage students to turn to journal articles. Finding journal articles used to mean using cumbersome paper indexes, and then finding the actual journals and locating the articles within them.
Now, students must choose a full-text database or databases that provide the coverage for their topic and search these resources.

When searching journal databases, there are two key ways that students can supercharge their searching. First, they may benefit from the use of more than one database. Second, they can search on related terms. The use of different descriptive keywords or synonyms will provide possible sources missed during the initial research phase.

The good news is that full-text databases and the use of multiple keywords mean that students have access to a great deal of information on their topic. The bad news, of course, is that full-text databases and the use of multiple keywords mean that students have access to a great deal of information on their topic. Often when the students see the results of using multiple databases, multiple times, with multiple keywords, they may become overwhelmed by the amount of information their research uncovers. At this point I encourage them to take a deep breath, pick up a highlighter, and dig into Big6 3.2, Find Information Within Resources.

As students begin to seek the information within their resources, they must read material with a questioning eye and use critical thinking skills to discover which information will be most useful for the given topic or project. During Task Definition, the student may have written questions that needed to be answered as a means to help clarify the assignment. Using these questions to help with accessing information is a method to speed the practice and incorporate a Big6 skill into the research practice.

Urge your students to look for the keywords they used during Location and Access when reviewing their resources. Finding these keywords can lead to accessing information that may be useful for the assignment. For example, a student reading a journal article about cell biology may find words related to their topic, which can be used in a search for additional books and journal articles.