MODULE 1: EFFECTIVE SEARCHING
LESSON 3: MANAGING INFORMATION OVERLOAD

Title

Effective Searching

Module 1, Lesson 3

Managing Information Overload

Introduction

After you feel confident selecting search terms and constructing a search string, you'll find yourself with a list of search results that might look great—or might be overwhelming. You might also find yourself with search results that are related to your topic, but are not specifically what you need. In this lesson, you'll learn strategies for managing information overload, including:

» How to plan your research efficiently based on your project outline

» How to refine your search for a manageable set of relevant results

» How to document your sources so that they're easier to access and use

Project Planning

Before you begin the search process, be sure to review your project outline. Aligning your search with the project's requirements will save you time in the long run. For example, if your assignment specifies that you use "recent" or "current" sources, you will probably want to use the advanced search option to narrow the dates on your search. That way, you won't waste time reviewing resources that aren't appropriate for your assignment.

You will be most successful in your scholarly research if you plan ahead and give yourself extra time for potential complications or changes. For example, imagine a really promising citation for an article that fits your information needs exactly—except that the full text of the article isn't available through your database. If you discover this citation the day before your project is due, you don't have any options for finding the full article. But if you have a week of lead time, you might ask your librarian for help and discover that the article is available via interlibrary loan in a few days' time.

Keeping your project outline at the forefront will also help you know when to stop searching for a specific subtopic and move on to other needed information. You'll be most efficient if you stop when you have enough information to complete your work.

Your Search Results
When you've conducted your initial search, take a look at the results to get a sense of how effective your search string is.

First, how many results are there? For example, if your search produces no results, or very few results, that may not be enough material for you to work with. With such a small set of results, you should also consider the possibility that you might be excluding some useful sources. If your search produces 15,000 results, on the other hand, it's not realistic to think you'll be able to review all of them to find the useful ones.

Next, how relevant do the results seem at a glance? Have you put them in order by relevance? Scan through the results and see what pops out at you. Do they seem too technical, too broad, or just plain irrelevant? Are there terms that appear over and over — and if so, are those terms useful for your topic?

Think of searching as a process, not an event. It's pretty unusual to get a perfect, useful, relevant set of results from the very first search string you enter.

Next, you'll learn how to adjust your search to get a broader or narrower set of results.

Narrowing Search Results
If you're overwhelmed with search results, there are several ways to work toward a more useful and workable set of results.

First, double-check the construction of your search string. If you've used a set of quotation marks or a set of parentheses, make sure it's closed correctly and encloses the intended terms. Make sure that any Boolean operators, like AND or OR, are capitalized.

Next, scan the first page or two of results and see how you might refine them. Most databases include an "advanced search" screen that allows you to be more specific about what results you want to see. Advanced search capabilities vary from one database to another, but these are a few common options to customize your search:

» **Date:** You can choose results published before or after a certain date, or within a certain date range.

» **Item type:** You can select results by publication type: for example, only books, only journal articles, or only book reviews.

» **Discipline:** In some cases, you can narrow your search to publications in a certain field or discipline.

» **Publication title:** You can search only for articles published in a certain journal.

» **Full text:** Some databases do not provide full-text access to every article that they include. In these cases, you can usually limit your search so that you see only results

where the full text is available. You may choose to find items that include your search terms anywhere in the text, or only those that include your search terms in the title.

» **Language:** You can restrict your search to materials in a certain language.

Some databases with a broader scope offer the option to restrict your search to peer-reviewed journals only, or may allow you to narrow your search to include only results that list references.

After you've used the advanced search options to narrow down your search, reassess the results and adjust your search string accordingly. Do you keep seeing a term or idea that isn't relevant to your research? Use the NOT operator to exclude it from your next set of search results. Do you see a term that is useful but isn't in your search string? Using AND to add it to your search string will narrow down the current set of results.

You might also reassess the terms you've used. Is there a more specific version that's likely to get you fewer results—and results that are more specific to your topic? A search for "*opera singers*" yields a lot of results, but a search for the more specific term "*mezzo sopranos*" brings up a much smaller set.

Finally, think about adding terms that narrow the search by geography, time, or discipline. A search for surfing will give you a lot of results, probably too many to wade through. But a search about *surfing in Kauai*, a search about *surfing in the 1920s*, or a search about the *physiology of surfers* will give you a much more focused, manageable set of results.

What if you've constructed a really solid search string and refined your results as far as possible, but still have too many results to sift through? This might be a good time to reassess the database you're using. Is there another that might be better tailored to your topic?

If you're using the best database with your best search skills and still flooded with search results, it's possible that your topic is just too broad. This is a good time to call on your librarian for guidance about how to use the library's resources to find the information you're looking for.

Too Few Results

If your search gives you fewer results than you had hoped or expected, you can make a few simple changes to your search string that will bring you a larger set of results.

First, rethink your terminology. If you've used a very specialized term, consider changing it to a broader term. For example, the specialized term "*shin hanga*," a type

of Japanese woodblock printing, yields a very small set of results. But the broader term "*Japanese woodblock printing*" gives you a much larger set of results to work with.

Second, consider minor adjustments to the way your search string is constructed. If you've connected two words using AND, think about changing the operator to OR, which will produce a larger set of results. You can also remove one of your search terms to increase the number of results.

Finally, try truncating a search term. Truncating is a way of reducing a word to its most basic part. This allows the database to pull up all of the forms of the word, instead of just the one you've entered. Most databases let you truncate using an asterisk. So a search for the truncated term *child** will pull up results that use the words *child, child's, children,* and *children's*—whereas searching for *children's* pulls up only the results that use the specific form of the word.

To truncate a search term, examine the search term you are using. What other variations of that word might be used in publications on the topic? Your goal is to reduce the word to its most basic form so that all of its other potential forms will come up in your search results. For example, if you're looking for articles about how to teach music, use the truncated form *teach** to include articles that use the words *teacher, teachers,* and *teaching*.

On the other hand, be aware that truncating a search term too much may bring in unrelated results. For example, if you are searching for information on staying in hostels, the truncated term *host** will also get you results that discuss the unrelated topics of *hostesses, hostages,* and *hostility*. Truncating to *hostel** will get you a more precise set of results about *hostels, hostelry,* and *hostelers*.

Staying Organized

Your research, and ultimately the creation of your academic paper, will be easier and simpler if you take care to document your sources throughout your research.

When you're searching a database, you will usually have the option to save chosen citations within a search session. This allows you to pick and choose citations as you adjust your search terms, and not have to worry about losing a promising lead.

Pay attention to how long these citations are saved. Some databases erase them after your search session ends, while others allow you to create a personal account and save them indefinitely. If you're not sure, it never hurts to export your chosen citations to a text file before you wrap up your search session.

Some databases also offer you the option to save your search strings themselves, making it easier to move back and forth between multiple complex search strings.

Citation Management
Many software packages and apps are available to help you organize your sources and avoid information overload as you move between different sources for your research. Check with your librarian to see which ones may be available through your library.

When you've collected citations within a database, you can choose to export your citations in a format compatible with many popular citation management programs. Functionality is different for each specific program, but generally, these programs can do some or all of the following:

» Save full text of the articles you select

» Allow you to add your own tags to sources

» Search across the text of multiple articles

» Produce citations in multiple formats

Choose a citation management program, or another way of managing your sources, before you start your research. This will streamline your research and ensure that you stay organized from the very beginning.

One final tip for keeping your sources organized: if you download copies of your articles, use a consistent naming convention that will keep them organized and help you remember their contents.

Next Steps
Remember the question from the beginning of this module: where would you start finding information for a research paper about a writer you've never heard of? Now that you've learned how to evaluate your library's sources and construct an effective search string, maybe you can see why typing the person's name into Google isn't necessarily the best answer.

» Next, we're going to move into a few practice activities related to what you've just learned.

» Then, you'll check yourself by taking an assessment of what you've learned in Module 1.

» After you've completed these activities, it's time to move on to Module 2, where you will learn how to evaluate sources and determine how reliable they are for academic research.