

8 Steps to... Research Success

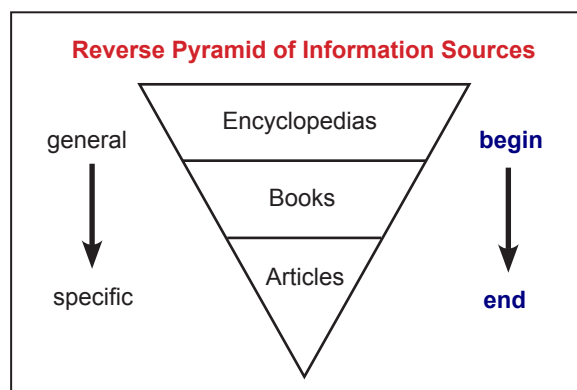
1. Start at the source. The UNB Libraries' website is the best starting place: lib.unb.ca. You will find thousands of electronic publications, including academic journal articles and e-books not available elsewhere on the internet. Plus, you will be directed to the 1.5+ million print volumes in the libraries' collections. Google cannot give you that.

2. Know your topic. Make sure your research topic is not too broad, too specific, or lacking context. Write your topic as a specific question to focus your research, and get context from an encyclopedia.

3. Descend the pyramid. With so much information available to you, where should you start? Try the "reverse pyramid" method: start with the most general information and then move on to publications that tend to be more specific.

At the beginning of your research, a reference tool such as an encyclopedia can provide a general overview of your topic and put it into a broader context. **Go beyond Wikipedia**—the library has thousands of more reliable academic reference articles, both online and in print.

After getting an overview, move on to more in-depth books, and finally go to the most specific (and perhaps more technical) journal articles.



4. Choose the right tools. The publications listed above can be found by using various "discovery tools"—databases on the libraries' website which let you discover different types of publications. From lib.unb.ca, you can find books, e-books, and a selection of articles via the **UNB WorldCat** search box. To **dig deeper** and find more articles, including encyclopedia articles, try a subject guide for your research area, which will direct you to librarian-recommended tools. Choose your subject area from the list under the heading **Research by Subject** at lib.unb.ca.

Note that while **Google Scholar** is excellent at finding known/specific items, it can include some unreliable articles in subject searches. When searching by topic, try a **library database** instead.

5. Evaluate your results. Your search will probably result in a lot of information—perhaps lists of hundreds of publications. How can you choose the best? Here are some basic things to consider.

Author's qualifications (Is s/he affiliated with a university or research organization?)

Publisher (Is it a university press, for example?)

Publication date (Do you require the latest information, or a classic or standard text?)

Length (Is the publication too brief? Too detailed?)

References (Reliable research publications usually list their sources.)

Subject/content details (Abstracts, subject headings, descriptors, tables of contents?)

Peer review (Academic journals use this rigorous publication process.)

Times cited (Databases such as **Scopus** tell you how many times other authors have cited an article.)

Also consider how the publications compare with the general body of academic literature in the subject area. It is usually best to **research broadly** to ensure you find a range of perspectives which generally represent academic thinking within the academic/research community on your topic.

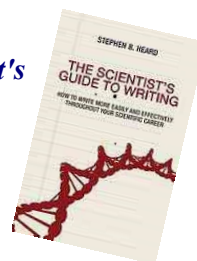
6. Read it! Take time to carefully read the key information sources you find, not just skim or scan them. You may need to “unplug” and find a quiet corner of the library. Think carefully about the arguments and ideas presented by the author.

Keep in mind that any subject expert who reads your research assignment (such as your professor) will likely be able to tell whether or not you have fully and critically comprehended the sources you reference.

7. Write right. There are several standard writing and citation guides at the library. For a list of recommended general book titles, see media.lib.unb.ca/research/handbooks.pdf.

A recommended science writing guide is UNB biologist Stephen Heard's *The Scientist's Guide to Writing* (library copies at T11 .H43 2016 and also available as an ebook).

- You can also get help from the **UNB Writing Centre** at the Harriet Irving Library. **Book appointments online**, or by email (wss@unb.ca) or phone (452-6346).
- During Fall and Winter terms, the Writing Centre offers **drop-in hours** in the Harriet Irving Library, the Engineering Library, and the Science & Forestry Library, on different weeknights.
- The Science & Forestry Library's drop-in writing help is on **Wednesday evenings, 6-10PM**. The SciForLib also has drop-in **Math Help** on **Mondays & Thursdays, 6-10PM**.



You can also visit the Writing & Study Skills Centre website to find **online** writing tips and advice:
unb.ca/fredericton/studentservices/academics/writing-centre

8. Take time to seek out the research experts. Do not assume that you will be able to find everything you need for a research paper in an hour or two. All aspects of the learning process require time. Finding relevant and reliable information, critically reading and evaluating it, and writing clearly about it—all are **time-intensive** activities.

As a general rule, expect the research process to take about three times as long as the writing process. You will likely need some help along the way. When you do, remember that the library is in the business of providing research help:

Research Help Desk @ the Harriet Irving Library

Location: Main/First Floor
Phone: 506-453-3546
Email: askus@unb.ca

Instant Message: lib.unb.ca/help/ask.php
Text: 506.800.9044
Online Help: lib.unb.ca/research



Subject Librarians

These librarians provide individual and small group research help in their subject areas, normally by appointment. For contact information, see a relevant **Research by Subject** webpage at lib.unb.ca.