

Getting started on your research

Need help at any stage of the research process? You can always ask a librarian. Visit the library's website for contact information:

<http://www.haverford.edu/library>

In order to conduct any research project well, it helps to approach it in an organized and deliberate fashion. Breaking down your research into a series of steps, such as those listed below, can help you track your progress. Since your growing understanding of a topic will lead you in unforeseen directions, it is unlikely that you will move through these stages in a linear way. Nevertheless, anticipating problems and knowing techniques for addressing these problems at each stage can both improve your work and save you valuable time.

Here are some helpful tips for successfully navigating the research process.

1. Selecting a topic

Often professors will specify writing topics for assignments, but sometimes you may have the freedom to choose a topic for yourself. It is important that this be a topic that will sustain your interest, but it is also important that you identify a topic:

- That you can research sufficiently in the time allowed
- That you can research using the tools and resources readily available to you
- That you can read about in a language you read well, and
- That your professor deems suitable for your assignment

If you're unsure about the feasibility of your topic, schedule a consultation with your professor or library subject specialist as early as possible.

Key tips

1. Browse current journals. If you have no idea what you want to write about, it can be a good idea to browse the recent contents of academic journals related to your field of study. These articles can help you think about ways to narrow down your topic. If you find a piece that really interests you, consulting the sources in its bibliography will give you a head start on your reading.
2. Draft some research questions. When you think about your topic, what questions do you have? Write them down. As you begin reading more, you will be able to refine these questions. Ideally you should narrow your focus to a single question. Knowing what your research question is will help you select good sources and reduce the time you spend reading about tangential matters.
3. Collect keywords. Off the top of your head, write down a list of keywords relevant to your research question. Test these out in the library catalog or a database suitable for your subject matter. Keep track of these keywords as you continue your research, and highlight the ones that produce the most useful results. Keep trying the most useful keywords as you research your topic using different tools.
4. Start thinking about your bibliography. If you are preparing to begin a large research project (such as your thesis), it is also good to think about setting up a bibliographic/citation management tool such as Zotero or EndNoteWeb at the beginning of your project. These tools will save you a lot of time when you are rushing to finish later.

2. Collecting Background Information

Most students unfamiliar with a topic have a difficult time developing a good research question or generating useful keywords. Luckily, there are a wide variety of library reference tools that can help. Although free online tools like Wikipedia can be great for many kinds of topics (such as the most current developments in technology, politics or entertainment) often you can find much richer information in a print or online resource purchased by the library. Here are some ways to search for a good reference tool:

- Search the catalog using your keywords and limit your search to reference materials.
- Try out the reference tools recommended on the Tri-College Subject Portal for your field.
- Ask a librarian for some recommendations.

Common reference tools:

- **Dictionaries:** Just like more familiar English language dictionaries, subject-specific dictionaries define terms and indicated the significance of particular concepts within the context of a particular discipline. If you come across an unfamiliar idea in your reading and want a reliable, quick explanation, dictionaries are great places to go.
- **Encyclopedias:** These reference sources—available on almost any subject area you can imagine—provide more in-depth information in lengthier articles. Typically these articles are cross-referenced with related entries, and include bibliographies of recommended sources. Encyclopedias are great places to look for keywords and to start your bibliography. Of course, since these types of sources take a long time to produce, it is important to pay attention to the publication date, and to do additional searching in databases and indexes for the most current information.
- **Bibliographies:** Book-length bibliographies list, and often annotate, sources relevant to a given subject. They are great places to look both when beginning a search and also to check for sources you might have missed along the way.
- **Databases and Indexes:** Rather than being organized according to a limited number of key concepts, databases allow you to search for a wider variety of terms across an entire body of literature. Some databases are more general in scope, while others are limited to a particular field. Electronic databases can search, and even provide, the full texts of articles. Indexes (both print and electronic) can bring together related articles using subject terms that have been assigned by a professional indexer.

Key tip

When you find one useful reference source, don't stop there: take a few minutes to browse for other sources in the same general call number range. You can physically browse the reference shelves at your library, or else browse virtually by clicking on the call numbers in a Tripod record.

3. Find books and media in catalogs

Searching in online library catalogs can be more complicated than using a search engine, but with careful thought, you can get results that are much more precise. In the Tri-College catalog, Tripod, you can use advanced search features to limit your search returns by date, language, or by location within the Tri-Colleges. Title searches also search chapter and series titles, so you can discover chapters relevant to your search terms as well as full-length monographs.

Key tips

1. When you find a relevant record, check its subject headings. Click on the heading closest to your topic to discover more materials.
2. Don't stop with Tripod. Search the holdings of more than 10,000 worldwide libraries using WorldCAT. If you can't find something you need in our local collection, check the EZ-Borrow database of regional libraries and (if you can't find something there) submit a request to Inter-Library Loan.
3. Like most catalogs and library databases, Tripod can perform boolean searches by combining more than one term using AND, OR, or NOT. This can help you make your search much more precise. Most catalogs and databases also allow you truncate a term to find its variants (for example, "child*" finds documents with the words "child", "children", or "childlike"). Finally, you can almost always find exact phrases when you place two or more words in quotation marks. Mastering these techniques increases your chances of finding what you need.

4. Use databases and indexes to find journals and news articles

Every database search interface is different, so you may need to try your search in a few different ways to discover the best way to perform your search using each tool. If you find yourself confused by your results, check the help pages for the database for more ideas. As a general rule, full-text searches will find more articles, but more of these articles will be irrelevant to your needs. Using search limits (citation and abstract only, specific date ranges, or a single language or type of publication) can help you increase the relevance of your returns.

Key tips

1. Make sure you've chosen the right database for your subject. If you're unsure where to start, the subject pages on the Tri-College Subject Portal or your library subject specialist can give you some helpful suggestions.
2. Index terms are like subject headings. If you're having trouble finding relevant articles using the keywords you have chosen, don't forget to browse your database's thesaurus in order to find related terminology.
3. Not all databases handle booleans or truncation in the same way. Check the database help page for suggestions on refining your search using these techniques.

5. Find internet resources

Finding information on the internet presents its own special challenges. When you wish to make use of an internet source, ask yourself:

- Who is the author of the source?
- What qualifications does the author have to give authoritative information on this topic?
- Does the author provide citations or references to other sources that back up his or her claims?

Once you are satisfied that your source is reliable, be sure to record the source's web address and the time and date at which you accessed it. This way, you will avoid having to retrace your steps from memory later, and you will minimize the risk that the source might change or disappear before you start writing.

Key tips

1. If you can't find something through Google, don't assume it doesn't exist. Most of the data on the internet simply cannot be accessed through search engines. Access to much of this material requires the use of fee-based resources, such as those to which our libraries subscribe. And (of course), there is much more that is only available in print! Any time you get stuck with an internet search, you can always ask a librarian for advice.
2. The single search box isn't your only option. If you're searching on a broad topic rather than a specific one and are finding too much irrelevant material, you might want to consider browsing a web directory rather than typing words into a box. A directory only includes sites that have been chosen by editors for their informational value on a particular topic. If search is what you prefer, it's important that you know that there are many different search engines out there. Each one indexes web pages in a different way, and some specialize in a particular subject or domain, so it can pay to try more than one of them.
3. Don't be afraid to try an advanced search interface. Taking this extra step can often get you to what you need more quickly. Google and other search engines offer helpful hints about improving your searching on their help pages. These are always worth a look. In addition to booleans, truncation, and finding exact quotations, scholars often find that limiting results to returns within a particular domain (such as ".org", ".gov", or ".edu") eliminates many irrelevant hits.

6. Evaluate resources

Most college assignments expect you to take a critical view of all your sources, not just those you may have found online. It is always important to consider whether the authors of what you are reading are properly qualified and present convincing arguments. Because your time for careful reading is limited, try to skim through your sources first to decide whether they are truly helpful. Once you have chosen your best sources, read the most relevant ones first, leaving the more tangential material aside to use as background information.

Key tips

1. Pay attention to publishers and their editorial practices. Learning to identify scholarly (often known as "peer-reviewed") and non-scholarly sources of information is an important skill to cultivate. Many databases (such as ProQuest) provide help with making this distinction.
2. Look for multiple points of view for a more comprehensive, balanced understanding of your topic. For political subject matter, for instance, try to collect sources from a variety of perspectives—unless you're analyzing the perspective of a particular news organization, try to consult sources from different types of media with varied political leanings. If you're researching a topic of international interest, don't forget to look for sources from different countries and regions around the world.
3. Look for book reviews written by experts in your field of interest. An experienced scholar's take on your source can help you evaluate it.

7. Cite sources in an appropriate format

As soon as you're ready to start writing, you're going to need to be prepared to track and cite your sources correctly. Giving others credit for their words and ideas is not only good academic practice, it is critical to fulfilling the requirements of Haverford's Honor Code.

Luckily, if you're using a bibliography preparation tool like EndNoteWeb or Zotero, this stage will be simple: the software does the work for you! Otherwise, there is lots of information online to help. The Citation Builder tool from the North Carolina State University Libraries automatically generates the most common types of citations in the most common formats; it's a good place to go for a short writing assignment, or if you don't have time to learn new software or consult a more detailed handbook. For more thorough coverage of the details of citation practices, it's best to consult the authorized handbook for the style your professor recommends. You'll almost certainly find what you need among the citation guides in the Tri-Colleges. Check the Subject Portal for a list of citation guides.

For a basic introduction to citation practices, visit the Tri-College guide, "Creating Citations--an introduction."

Key tip

If at all possible, leave plenty of time for proof-reading and checking your citations before you hand in an assignment. Tiny mistakes can reduce the effectiveness of your writing and take away from all of the hard work that has gone into your research.