While in college, you will need to conduct research to find information for papers and other assignments. After college, you will continue to do research throughout your life in order to make informed decisions about your job, finances, health, family, and community. The information literacy skills you build, and continue to develop, will make the process of finding information for your assignments, your work, and your life, much easier.

In this tutorial, we will focus on the different sources of information, where to find these sources, how to choose and evaluate the best ones for your research, and how to properly use them in your assignments and papers.

TILT is divided into four modules covering different aspects of the research process:

**Sources of Information**

**Finding Information**

**Evaluating Sources of Information**

**Using Information from your Sources**
Sources of Information

The combined resources of your library and the Internet create an almost endless amount of information available to you. With all of these choices, where do you find the answers?

You will learn about...

different types of sources.
What sources are available to you, through the library or on the Internet?

how to choose the best sources for your research.
Different types of sources are good for different types of research. Which sources should you be looking for?

The Flow of Information

<table>
<thead>
<tr>
<th>Minutes and Hours after an event</th>
<th>Next Day</th>
<th>Weeks after</th>
<th>Months after</th>
<th>Years after</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social media exchanges (text messages, emails Web site postings) and TV reports broadcast instant information about unfolding events.</td>
<td><strong>Newspaper articles</strong> and continued <strong>media coverage</strong> focus increased public attention on the event.</td>
<td>Facts and opinions are expressed in <strong>magazine articles</strong> or in blogs.</td>
<td>Scholars begin to examine social, political, or economic implications of the event and provide their analysis by publishing <strong>articles in academic journals</strong>.</td>
<td>As more information is gathered and made available, experts write <strong>books</strong> on the subject. Established knowledge is summarized in <strong>encyclopedias</strong> and other reference sources.</td>
</tr>
</tbody>
</table>
Websites

In the last couple of decades, the Web has grown to be the biggest repository of information available to most of us and plays an increasingly important role in research, both in academic contexts and in everyday life.

Websites can be very good sources of information. They are good at providing up-to-the-minute news and information about current events, trends, and controversial topics. They can provide information about almost any topic, including many scholarly subjects. They also allow you to get information directly from companies, organizations, and government agencies.

Because anyone can publish anything on the Web, however, information can often be inaccurate, biased, or outdated. When using information on the Web, it is important to evaluate whether the information is credible.

Use websites to...

- find ideas, opinions, and personal information.
- find government information and statistics.
- find company information.
- find images and multimedia.
- find current news and information.
- share and discuss information.

Examples of Websites

Information on the Web comes from different Internet domains. This can help you identify the type of information: commercial (for-profit), organizational (non-profit), educational, or governmental. You can usually tell what the domain is by looking at the Web address (URL).

Commercial (.com)
- www.tolkien-studies.com
- www.nytimes.com
- http://findarticles.com

Organizational (.org)
- www.americanheart.org
- www.wikipedia.org
- http://nofavt.org

Educational (.edu)
- www4.uwm.edu/libraries/digilib/tibet/index.cfm
- www.fordham.edu/halsall
- http://www.albany.edu/sourcebook/

Governmental (.gov)
- www.census.gov
- www.ed.gov
- www.vermont.gov
Periodicals

Periodicals are sources of information that are published periodically – i.e. at regular intervals (daily, weekly, monthly, etc.) The term periodicals generally refers to magazines, newspapers, and scholarly journals.

While periodicals have traditionally been print publications, most of them can now be accessed electronically, either on the Web or through library databases.

Newspapers

Newspapers are periodicals about current events usually published daily and intended for a regional audience. Since there is usually at least one in every city, they are a great source for local information.

Use newspapers…

- to find current or historical information about international, national and local events.
- to find editorials, commentaries, expert or popular opinions.

Examples of Newspapers

Newspapers are available both in print and electronically (through library databases and the internet):

Print

You can find local and national newspapers in many locations. College libraries have print copies of current newspapers available for browsing and often archive older editions for future use.

- Burlington Free Press
- New York Times
- Le Monde

Electronic

College libraries subscribe to collections of local, regional, national newspapers which are housed online in databases. When you access these collections through a library website, you have access to the same content you would if you had the print version of the newspaper. Newspaper databases include:

- NewsBank
- LexisNexis Academic
- ProQuest Historical New York Times

Many newspapers also publish articles online, though the Web-based version may contain different articles than the print copy; newspapers may also charge for access to some or all of their articles through their websites.
**Magazines**

Magazines are periodicals about topics of popular interest and current events intended for a general (non-scholarly) audience. They are usually heavily illustrated and contain advertising. Articles are written in non-scholarly language and do not usually include bibliographies. Articles are generally written by professional journalists rather than subject experts.

**Use magazines…**

- to find information or opinions about popular culture.
- to find up-to-date information about current events.
- to find general articles for people who are not necessarily specialists about the topic.

While magazines often cover serious issues, they generally shouldn’t be used as sources in scholarly research.

**Examples of Magazines**

Magazines are available both in print and electronically:

**Print**

Magazines are available in many locations like grocery stores and bookstores. Most college libraries have a collection of print magazines that you can browse and read within the library.

- *U.S. News and World Report*
- *Bon Appetit*
- *New Yorker*
- *National Geographic*
- *Entertainment Weekly*
- *Women’s Health*
- *Psychology Today*

**Electronic**

College libraries subscribe to large collections of magazines which are housed online in databases. When you access these collections through a library website, you have access to the same content you would if you had the print version of the magazine. Databases that include magazines include:

- Popular Magazines Database
- HealthSource: Consumer Edition
- Culinary Arts Collection

Though you can often find magazine articles on the Web, the online version may contain different articles than the print copy; magazine publishers may also charge for Web-based access.
Journals

Journals are periodicals that publish original research and articles on recent developments in specific scholarly disciplines. They are usually published by academic institutions, professional organizations or specialized scholarly publishers. Articles are written by scholars in an academic or professional field.

Many scholarly journals are peer-reviewed. In the peer-review process, experts in the field must review approve and articles before they are accepted for publication. This helps ensure the published articles are accurate, well researched, and make a significant contribution to the field.

Articles in scholarly journals…

- don't usually contain pictures or advertisements.
- often start with an abstract.
- include references or bibliographies.
- list the author and their credentials or affiliated institution.
- are written in specialized or scholarly language and usually assume some background knowledge on the part of the reader.

Use journals…

- when doing scholarly research.
- to find original research and scholarly opinions on your topic.
- to find bibliographies that point to other relevant research.

Because the peer-review process is time-consuming, Journals are generally not a good source for current news or up-to-the-minute developments in a field.

Scholarly journals are key resources for academic assignments!

Examples of Journals

Journals are available both in print and electronically:

Print

You can find print copies of academic journals in your college library. Many libraries also archive older volumes of print journals to be accessed for future research purposes. If your library doesn't have print copies of a journal, you can often get copies of articles through interlibrary loan.

- Science
- Journal of Communication Disorders
- Radical History Review
- Journal of Folklore Research
- International Journal of Business Research
Electronic

College libraries subscribe to academic journals electronically; like newspapers and magazines, journals are housed online in databases. When you access these collections through a library website, you have access to the same content you would if you had the print version of the journal. Journal databases include:

- Academic OneFile
- JSTOR
- ScienceDirect
- Academic Search Premier

Typically, the last 5 to 10 years of a publication is available electronically, though there are databases which provide access to journal archives, such as JSTOR (journal storage).

Books

At the college level, you will be using books that have been written for an academic audience (scholars, scientists, and student researchers), rather than for the general public. These books typically contain more scholarly or scientific information (e.g. data, research studies, analysis of many other academic sources) and have extensive bibliographies.

Academic books have also been edited and reviewed by experts in the field, so you know the information is reliable. Since it takes years to write and publish academic books, they are not always the best sources for very current events and issues.

Use books...

- when you need an overview or general information about a topic.
- to find summaries of research to support an argument.
- to put your topic in context with other important events or issues.
- to find established theories and facts.
- to find historical information.
- to find classic treatises and works (e.g. Darwin on Evolution, Plato on political philosophy).
Examples of Books

Books are available both in print and electronically:

Print

College librarians select books based on academic merit, relevance, and overall quality of the work. Many of these books are published by university presses and not found in bookstores or public libraries.


Electronic

Electronic versions of books (eBooks) are available either online or as downloadable files. College libraries purchase some books in eBook format so that they are accessible online.

- EBSCO eBooks
- ScienceDirect eBooks
- STAT!Ref Medical Textbooks

Reference Materials

Reference works (encyclopedias, dictionaries, etc.) contain concise, factual entries often written by different experts on the topic. Reference materials, especially materials that focus on specialized subjects, are good starting points for learning about a new topic.

Use reference materials...

- when looking for background information on a topic.
- when trying to find key ideas, important dates or concepts.
- for definitions of terms.
- to find references for other sources of information.
Examples of Reference Materials

Reference Materials are available both in print and electronically:

Print

College libraries provide a wide array of print reference materials; most libraries have a separate section of the library dedicated to print reference books and materials.

- *Encyclopedia of Post-Colonial Literatures in English*
- *Dictionary of Food: International Food and Cooking Terms from A to Z*
- *Business Spanish Dictionary*
- *The Penguin Biographical Dictionary of Women*

Electronic

Reference books are increasingly available electronically. College libraries provide access to electronic reference book collections which provide access to full-text reference works online.

- Encyclopedia Britannica Academic Edition
- CREDO Reference Database
- Biography in Context
- Literature Resource Center

Government Sources

The U.S. Government produces many official documents, reports, statistics, and materials. These sources are a great place to find data and original research. There are also many historical documents and materials, such as photographs, maps, and primary source documents that are kept in national archives and libraries.

Use government documents & materials...

- when you need demographic or population information
- when you need education statistics or policies
- when you need impartial health information or statistics
- when you need historical maps or geographical data
Examples of Government Sources

Government Sources are available both in print and electronically:

Print

Print copies of government documents are typically held in college libraries, archives, historical societies, and museums. Access to print materials can be limited and many older publications and documents are not yet available online.

- historical societies
- Federal Depository Libraries
- State & Federal Department/Agency Offices

Electronic

Government documents are made openly available to the public and therefore are freely available on the Web.

- National Center for Education Statistics
- Library of Congress
- U.S. Census & USA.gov
- Government Printing Office
- The National Archives
- National Center for Health Statistics
- The American Memory Project

What do you need?

Hopefully now that you know the wide range of sources available to you, you have some ideas about what types of sources might be best for your research.

Remember that choosing a variety of sources can be an excellent way to find support for your thesis as well as provide different points of view on your topic. You can develop more robust and convincing arguments by not relying too heavily on one source of information.
**Try it Out!**

**Where would you look for…?**

1. information about the products manufactured by a specific company.
   - a. encyclopedia

2. data on the US population broken down by age and race
   - b. website

3. an in-depth history of US involvement in Central America
   - c. journal article

4. research on the safety of genetically modified food
   - d. newspaper

5. a brief overview of the history of Wales
   - e. government source

6. information on local events
   - f. book

Match each type of information from the left column to the source in the right column that would be the best place to look for it.

**Good Job!**

Understanding what **Sources of Information** to go to for different information needs is the first step to finding **relevant, credible, and usable** information.
Finding Information

Searching for academic sources is a process that is new to most college students; it requires planning, a creative strategy and mindful searching that can be time-intensive.

You will learn about...

- brainstorming keywords and search terms.
- using the library to find information sources.
- searching the Web effectively.

Brainstorming and Keywords

Before you begin your research, write out a few detailed sentences about your topic. Underline the main words in these sentences. From the description that you wrote, create a list of related words and phrases.

Once you have an initial list, think of other terms that also describe your topic. Write down any ideas you have, even the ones that seem harebrained; sometimes they end up being the most helpful.

Come up with synonyms - other words or phrases that have the same meaning - for your terms. Don't forget to list alternative spellings, abbreviations, and acronyms for words on your list. You should also identify words that have broader or narrower meanings than your original terms.

The words and phrases you come up with can then be used as keywords in your searches.

Searching Library Resources

In addition to traditional print materials and media, academic libraries provide access to a wide range of electronic resources, including newspaper, magazine, and journal articles, electronic reference collections, and eBooks.
Library resources...

- **have restricted access.** Though these resources are not cheap, academic libraries purchase these sources for students, faculty, and staff to use. (While electronic library resources are accessible over the Internet, they are different from the resources available freely on the Web. This is why you will generally need to log in to resources.)
- **go through a review process.** Library resources are specifically selected to be reliable, relevant, and useful for academic research.
- **are organized.** Library collections (in print and electronic) are classified by subject to make it easier to find sources on a specific topic. Advanced search functions in library electronic resources allow for powerful search techniques.
- **are meant to be kept permanently.** One of the primary functions of a library is to be a collection of information published throughout time. As well as finding current information, you can find books that are no longer published and older articles from newspapers, magazines, and journals that are no longer available in print.
- **come with help.** Librarians are professionally trained to assist you in sorting through all these information sources. They are glad to help you learn to use new tools and find what you need to succeed in your research.

Library Catalogs

Library Catalogs allow you to search the items owned by a library (or group of libraries). Traditionally, this means, the books, films, and periodicals available to you, but more and more electronic resources show up in catalogs now, as well.

Use a Catalog...

- to search for books and films at a library by name.
- to find a specific book by title or author.
- to explore the available books and materials by subject area.

**Examples of Library Catalogs**

**Public Library Catalogs**

- [Fletcher Free Library (Burlington)](https://www.fletcherfreelibrary.org)
- [Kellogg Hubbard Library (Montpelier)](https://www.kellogglibrary.org)
- [Rutland Free Library (Rutland)](https://www.rutlandlibrary.org)
College Library Catalogs

- Vermont State Colleges
- University of Vermont

National & Global Library Catalogs

- Library of Congress
- WorldCat

Library Databases

Think of databases as huge electronic filing systems. Databases allow you to search and access electronic magazine, newspaper, and journal articles, as well as electronic reference sources and eBooks.

Use databases...

- to find magazines, journals or newspaper articles.
- to search electronic reference sources or eBooks.
Examples of Databases

General Subject Databases
- Academic OneFile
- Academic Search Premier

Subject-specific Databases
- ScienceDirect (science & social science materials)
- PsycINFO (psychology journals)

Reference Databases
- CREDO Reference (general-purpose reference sources)
- Biography in Context (biographical sources)

eBook Databases
- EBSCO eBook Source (multi-subject books)
- STAT!Ref Medical Textbooks (medical textbooks)

Which Database?

Choosing the right database is an essential part of research. How do you know which one to pick?

By Resource Type

Library databases house many different types of resources: reference materials, such as dictionaries and encyclopedias, eBooks, and various periodicals, like newspapers, magazines, and journals. One way to pick a database is to determine which type of material you're searching for and select a database that houses that type of resource.

By Subject Area

Most library databases are subject-specific. There are databases for education, psychology, business, health and medicine...virtually every academic discipline! Other databases are more general or multi-disciplinary, and provide access to materials on a wide variety of subjects. If you cannot locate a database that is specific to your subject area or topic, try a general or multi-disciplinary database.

By Faculty or Librarian Recommendation

Still not sure which database to start with? Ask your faculty member or a librarian for their recommendation. Faculty members are experts in their fields and may be familiar with a specific library database or resource they can recommend. Librarians are database experts and can help you determine which materials are housed in which database. You can usually find recommended databases by subject on your library's website, and you're always encouraged to ask for help picking a database.
Library Search Strategies

**Keyword Searching**

Keywords are words related to your topic that you use to start searching. When you do a keyword search, your results in a library catalog or database will include those words somewhere in the record.

**Using keywords to start**

- **find specific information** (a fact, date, or name).
- **explore a topic**. Trying out different related keywords lets you see the range of information in a given subject area and can help you to focus in on a particular sub-topic.
- **to find subject terms for your topic**. (See "Subject Searching" below for more on this.)

Let's say you do a keyword search in a library catalog for free speech. Your search will find the following catalog record because it contains those terms:

**Authors**
Joyce-Hasham, Mariyam.

**Title**
Web offence.

**Source**

**Subject Headings**
- Internet
- Freedom of Speech
- White Supremacists
- Censorship

**Abstract**
As racist and extremist views proliferate over the Internet, governments are trying to determine whether Internet free speech has gone too far, or whether the extremist rhetoric posted on the Internet is a small price to pay for a medium that encourages expression.

**Subject Searching**

Subject headings allow you to find documents based on what they are actually about, rather than just the keywords they contain.

**Using subject headings & terms to search comprehensively**

Subject headings are a set of standardized terms that libraries use to organize information. To do a subject search, you need to identify which subject heading you need to use for your topic. **For example**, if you do a subject search for "ocean birds" and a database uses the subject heading "sea birds," you won't get any results.

The best way to find subject headings start is by conducting a keyword search first and looking at the subject heading(s) of a relevant item.
Going back to the record we looked at earlier, we can see that the correct subject heading for articles on free speech in this database is **Freedom of Speech**. We could then click on the heading to see a list of the other articles in the database with that subject heading.

Authors
Joyce-Hasham, Mariyam.

Title
Web offence.

Source

Subject Headings
Internet
**Freedom of Speech**
White Supremacists
Censorship

Abstract
As racist and extremist views proliferate over the Internet, governments are trying to determine whether Internet free speech has gone too far, or whether the extremist rhetoric posted on the Internet is a small price to pay for a medium that encourages expression.

**Title and Author Searching**

Searching by title or author to get specific

If you know of a specific source you can search by title or author to...

- find a specific book or film.
- find a specific newspaper, magazine, or journal article.
- find books or articles by a particular author (remember, last name, first name.)

Finding a particular magazine or journal article

Generally, the easiest way to find a specific article is to see if the library has access to the periodical in which the article was published. Once you find the periodical (either in print or electronically), then you can track down the specific volume, issue, and article you need. You should search the library catalog (for print periodicals) and the library's online journal list or index (for electronic periodicals) to check for what's available and where.

For example, if you were looking for this article:

"Gossip on the web: Truth, lies and cyberspace."
*The Economist* 351.8116 (April 24, 1999): 84.

...you would search the library's journal index for **Economist**, not Gossip on the web: truth, lies and cyberspace.
Advanced Searching

Advanced Search Options

Every search tool, on the Web or through a library, has advanced search options. These options may help you limit your search by:

- format
- author
- date
- location
- subject
- publication

Though the options may vary in different resources, exploring advanced search options will reveal powerful tools to help you search more effectively.

Advanced Search Techniques

There are some advanced search techniques that will work in a number of different search tools.

- **Phrase searching** - Putting a phrase, title, or name in "quotation marks" will return results that contain that **exact phrase**.
- **Combining search terms** - Combine search terms using the word **AND**, to search for several different words or phrases at once. For example, "Stephen King" **AND** "Christine".

Searching the Web

The World Wide Web is a part of the Internet that is openly, freely, accessible to any user with an Internet connection. You can think of it as an online marketplace, at which you can find information, ideas, purchase goods and services, and communicate with people.

You can use the Web to find and access materials from proprietary (owned) sources too. For example, library websites are gateways to subscription materials owned by the library, such as journals and eBooks.
Search Engines

Search engines make it easy to search through millions of Web-based materials by retrieving webpages that contain keywords you enter into the search box.

There are also website aggregators which are websites that feature content that has been continually fed from other websites and displayed in a single location for you to review; many news and current event websites are actually examples of website aggregators.

Web Search Strategies

Keywords & Phrases

Brainstorming before you start searching will generate a good list of keywords and phrases. If you're searching for a common phrase or want to find an exact set of words, use "quotation marks" around the words and that exact phrase or set of words will appear in your search results.

Advanced Search Options & Preferences

Most search engines have advanced search capabilities or preferences which allow you to customize your results; you can specify the format of the material you want to find, set your preferences to include your library’s collection of databases, and limit your search results to a specific Internet domain (e.g. .gov, .edu, .org).

Your Search is Over

The process of finding academic sources includes brainstorming relevant keywords and phrases, selecting appropriate databases or search engines, and strategizing the most effective way to go about your research. It should also include a consultation with your faculty member and librarian so that you can get recommendations about the process and resources to use.
Try it Out!

Follow along with the instructions for a guided tour of a simple search in one out library databases.

1. First, open the Academic Onfile database
   If you see a VSC login screen, enter your username and password and login to access the database. *(If you are already logged in or are on campus, this step may be unnecessary.)*

2. Search for words Vermont Yankee.

3. From the articles returned by your search, find one that looks relevant to your search and click on the title to view the article.

4. Look for the Related Subjects section on the left side of the screen. These are the subject headings that have been assigned to the current article.

   From here you can...
   - follow these links to find more articles with those topics, or
   - use these words and phrases as search terms in other library databases, in the library catalog and on the Web to improve your search results.

   For now, click on one of the subjects to see a list of articles with that subject.

5. Now you should see a listing of all the articles in the database with that subject term.

   This technique - performing keyword searches and then looking at the subject terms assigned to relevant articles - is a good way to explore a topic and identify good search terms.

Good Job!

Learning techniques and strategies for Finding Information in library databases or on the internet will help put relevant, credible, and usable sources of information at your fingertips!
Evaluating Sources of Information

Some sources of information are better for academic research than others. As you start collecting print, media, and electronic sources that match your topic and assignment, you'll want to evaluate, or think critically about, the sources you encounter.

You will learn...

- how to identify credible sources and websites.
- the difference between popular and scholarly sources.
- the difference between primary and secondary sources.

Evaluation Criteria

When looking at any new source of information (books, articles, websites, etc...) you should carefully evaluate it in terms of some **basic criteria**:

**Currency**

Information can quickly become obsolete. Supporting your thesis statement with facts that have been superseded by new research or recent events weakens your argument. Of course, not all assignments require the most current information; older materials can provide an historical or comprehensive understanding of your topic.

How do you know if the timeliness of your information is appropriate?

- When was the information published or last updated?
- Have newer articles been published on your topic?
- Are links or references to other sources up to date?
- Is your topic in an area that changes rapidly, like technology or popular culture?

**Relevance**

Relevance is important because you are expected to support your ideas with pertinent information. A source detailing Einstein's marriage and family life would not be germane to his theories in physics.

How do you know if your source is relevant?

- Does the information answer your research question?
- Does the information meet the stated requirements of the assignment?
- Is the information too technical or too simplified for you to use?
- Does the source add something new to your knowledge of your topic?
Authority

Authority is important in judging the credibility of the author's assertions. In a trial regarding DNA evidence, a jury gives far more authority to what a genetics specialist has to say compared to someone off the street.

How do you know if an author is an authority on your topic?

- What are the author's credentials?
- Is the author affiliated with an educational institution or prominent organization?
- Can you find information about the author from reference books or the Internet?
- Do other books or articles cite the author?

Accuracy

Accuracy is important because errors and untruths distort a line of reasoning. When you present inaccurate information, you undermine your own credibility.

How do you know if your source is accurate?

- Are there statements you know to be false?
- Are there errors in spelling, punctuation, or grammar?
- Was the information reviewed by editors or subject experts before it was published?
- What citations or references support the author's claims?
- What do other people have to say about the topic?
- Is it clear who the authors are?
- What is the date of the material?

Purpose

Purpose is important because books, articles, and Web pages exist to educate, entertain, or sell a product or point of view. Some sources may be frivolous or commercial in nature, providing inadequate, false, or biased information. Other sources are more ambiguous concerning their partiality. Varied points of view can be valid, as long as they are based upon good reasoning and careful use of evidence.

How do you determine the purpose of your source?

- Why did the author or publisher make this information available?
- Is there an obvious bias or prejudice?
- Are alternative points of view presented?
- Does the author omit important facts or data that might disprove a claim?
- Does the author use strong or emotional language?
- For Web pages, what is the domain or site?
Evaluating Websites

Because anyone can publish anything on the Web, information can often be inaccurate, biased, or outdated. When using information on the Web it is especially important to evaluate whether the information is credible.

Questions to ask:

- What can you tell from the website address (URL)?
- Who is the author of the site? What are their credentials?
- Is there a group, company, association or institution associated with the site? Are there sponsored links or ads?
- Does the website cite its information sources or provide links to sources?
- What is the purpose of the website? Is it trying to sell a product or service?
- What date was the website last updated?

What's in a URL?

Being able to properly decipher URLs is an important skill in doing research online. Let's take a look at what makes up an address:

http://www.vermont.gov/portal/agriculture/weather.php

Almost all addresses you see will begin with http://. This tells your Web browser how to download the page. HTTP (Hyper Text Transfer Protocol) is the set of rules describing how Web files are sent across the Internet.

You can generally ignore the http:// when typing in Web addresses.

http://www.vermont.gov/portal/agriculture/weather.php

The part of the URL between http:// and the first / includes the domain name. Reading from right to left:

.gov is the Top-Level Domain (TLD). This part of the address can tell you a lot about what kind of site you are looking at. Here are some of the most common ones you'll see:

- .edu - .edu domains are reserved for educational institutions in North America.
- .gov - .gov sites are restricted to official US state or federal governmental organizations.
- .com, .org, .net, .info - These domains can be purchased by anyone. Traditionally, .com domains have been used for commercial sites and .org domains have been used for nonprofits, but this isn't universally true.
- .uk, .cn, .us, .tv, .sa, etc. - These are all country-based TLDs. Domains ending in ".uk", for example, are based in the United Kingdom. (Some countries allow outside organizations to use their domains, though, so these don't always indicate where a site is based. The island nation Tuvalu makes money by allowing television-based companies to buy its ".tv" domains, for example.)
**vermont.gov** is the part of the address that is registered to a particular organization (or person). In this case, *vermont.gov* indicates that this website is an official governmental site run by the state of Vermont.

.edu and .gov sites are restricted to educational and governmental organizations, so you can be relatively sure about who runs the site. Be careful with other domains, though (.com, .org, .net .info, etc.). Since anyone can register any domains, sometimes people will use valid-sounding domain names for the purpose of misleading people. (For example, [http://www.gatt.org/](http://www.gatt.org/) is a fake homepage for the World Trade Organization - formerly known as the General Agreement on Tariffs and Trade.)

If you want to check to see who has registered a domain name you can do so by doing a [www.WHOIS.net](http://www.WHOIS.net) search.

You can ignore the *www* - it's a holdover from the how web servers used to be set up. (Many newer sites don't use "www" at all.)

**http://www.vermont.gov/portal/agriculture/weather.php**

Parts of the URL between slashes ("/") are **subdirectories** of the website. Subdirectories are often used to organize content. When you see more than one subdirectory separated by slashes they are nested - In this case, the page is contained in a /agriculture/ subdirectory which is inside the /portal/subdirectory of the Vermont state.

Looking at the subdirectories in the URL can give you a good idea about the **context** of a page in the site as a whole. One good way to do this is by "truncating" the URL - seeing what happens if you remove the rest of the URL after each slash:

- **http://www.vermont.gov/portal/** - This is the main public portal of the Vermont state website.
- **http://www.vermont.gov/portal/agriculture/** - This is the "Agriculture & Environment" page of the Vermont state website.

Here, the subdirectories tell us that this page is part of the State of Vermont's public portal and is probably related to agriculture or the environment.

**http://www.vermont.gov/portal/agriculture/weather.php**

The last part of the URL (after the last slash) is the **name of the file**. The file name will often tell you something about the page's purpose or content. (Note that the file name won't always be displayed in the URL, though.)

Here, *weather.php* is a page giving current weather conditions in Vermont.
Information in Motion: A Note on Social Media

Social networking sites (e.g. Facebook, Twitter, LinkedIn), news aggregators (e.g. Digg, Reddit, StumbleUpon, etc.) and blogs have made it easy for anyone to share, discuss, and comment on information from all over the Web.

These sites can be a good way to encounter new information you are interested in, but this means that you might not encounter information in its original context. Remember to take the extra step and track the information back to where it was originally published. You'll be able to judge the credibility of the information best if you see it in its original context.

Popular or Scholarly?

One important way to distinguish types of sources is by their intended audience. We often make a distinction between popular sources that are intended for a general audience, and scholarly sources that are intended for experts and researchers in the academic or professional community.

You may already know about the difference between popular magazines and scholarly journals. Magazines are intended for a general audience, are written in non-scholarly language, and are generally written by professional journalists. Journals, on the other hand, are intended for scholarly researchers, are written in specialized or scholarly language, and are written by scholars in an academic or professional field.

This same distinction can be made with other sources of information, as well. Books and websites that are intended for a scholarly audience are more appropriate for academic research than those intended for a popular audience. If you are able to recognize the differences between a popular and scholarly source, then you can focus your research to retrieve only the type of information you need.

Examples of Popular Sources

- *National Geographic* (magazine)
- *10 Questions Science Can't Answer (Yet)* (book)
- [http://www.gizmodo.com](http://www.gizmodo.com) (website)

Examples of Scholarly Sources

- *The Journal of Renewable and Sustainable Energy* (journal)
- *Virtue of Necessity: Inconclusiveness and Narrative Form in Chaucer's Poetry* (book)
- [http://ncar.ucar.edu/](http://ncar.ucar.edu/) - The National Center of Atmospheric Research (website)
Popular vs. Scholarly Books

Scholarly Books

- published by academic or university presses
- written by scholars or scientists with advanced degrees
- contain extensive references or bibliographies

Popular Books

- published by popular presses
- written for the general public
- often contain personal narratives or advice (e.g. self-help, how to)
- may include references to scholarly or scientific works

Popular vs. Scholarly Articles

Scholarly Articles

- published in academic or scientific (peer-reviewed) journals
- written by scholars or scientists with advanced degrees
- contain extensive references or bibliographies

Popular Articles

- published in popular magazines and journals
- written for the general public
- often contain personal narratives or advice (e.g. self-help, how to)
- may summarize or refer to scholarly or scientific works

Popular vs. Scholarly Websites

Scholarly Websites

- published by academic or government research institutions
- contain information by scholars or scientists
- typically from .edu or .gov domains

Popular Websites

- published by anyone
- written for the general public
- often contain ads or sponsored links
- typically from .com or .org domains
Primary or Secondary?

Information sources can be classified as primary or secondary based on their originality and proximity to a source. Primary sources come directly from the source or person. They are original materials. Secondary sources analyze, interpret and comment on primary information.

Examples of Primary Sources

- books or journal articles that present original ideas or research
- newspaper articles reporting on an event
- statistics, interviews and surveys
- autobiographies, diaries and original writing
- artifacts, photographs, artwork, and music
- patents and legislation

Examples of Secondary Sources

- biographies
- books or journal articles that report or summarize the findings of others
- newspaper articles offering commentary or opinions
- reference works (encyclopedias dictionaries, etc.)

Primary sources provide the most direct, unfiltered sources of information. Secondary resources, on the other hand, allow you to get a broader overview of a subject and how it fits into a discipline.

So, you found some good sources?

After you've identified the types of sources you need and evaluated them for quality and relevance to your topic, you can start to integrate them into your writing.

If you have questions about which sources are appropriate for an assignment or what types of sources you'll be expected to use, be sure to ask your faculty member or check the assignment for details.
Try it out (True or False?)

The Web is a great place to find information, but be wary of what you find. Be sure to evaluate a website by investigating who is behind the information, checking to see when it was last updated, and, if needed, verifying information with a few other sources before you use it as a credible source.

One of these websites is a real source and one is a fake. Can you tell which is which? What clues can you find to help you make an informed decision?

World Economic Forum
http://www.weforum.org/

World Economic Forum
http://www.we-forum.org

Good Job!

Carefully evaluating Sources of information is an important part of making sure information you use in your research (and throughout your life) is relevant, credible, and usable.
Using Information from your Sources

Once you have found a few information sources that are relevant for your research, it's time to think about how you will integrate the information from these sources and use it in your paper or assignment.

Hopefully, at this point, you are starting to feel more confident about the research process and are gaining a greater understanding of your topic. It is also easy to feel a bit overwhelmed by all the information you are finding.

You will learn about...

- managing information from your sources.
- organizing and documenting the information you'll need to cite your sources.
- integrating information from academic sources into your work.

Reading Scholarly Sources

Once you've found some scholarly sources (academic journal articles, for example), you may find that they're written using scientific terminology or have complicated information about research methodology. How do you "digest" that sort of information?

1. **Look at the abstract**
   - The abstract of an academic article or case study is typically a paragraph at the very beginning which describes the study, the process, and the findings. This is a great way to tell if the article or study is relevant to your own research.

2. **Read the introduction**
   - Often the first few paragraphs of the article or study itself describe the reason for the research and a bit of background information to help you understand the context for the rest of the information.

3. **Skip to the conclusion**
   - That's right! Jump to the very end of the article or study and look for the discussion or conclusion of the research. This will tell you what the findings are and if they support your own research/thesis.

4. **Review the entire article and locate the "quotable" information**
   - Once you understand what the article or study is proving and the basic information being stated, look for specific quotes or sentences you can quote or summarize in your own work. These should be statements which speak to the overall findings or scientific evidence that the article or study is proving.

5. **Look at the bibliography**
   - If you've found an article or book which is relevant for your topic, use its bibliography to locate even MORE sources on that topic!
Managing Information from your Sources

As you begin to read sources and collect information, it is important to develop an effective strategy to organize and manage your information. Keeping track of what you need from the beginning can save both time and frustration.

Imagine...

Your paper is due in 2 hours and you still have your bibliography left to do. No worries, right?

Until you realize you didn't write down the page number you needed for that quote and you returned the book this morning...

Keeping Track of your Sources

Whether it be color-coding your notes, highlighting passages you want to quote or paraphrase, or using index cards to manage your citations, establishing a system for organizing your materials is essential.

One good way to keep track of your sources is to keep a Research Log:

1. Create a document with two sections: Preliminary and Final.
2. As you locate potential sources, enter the source citation (in proper MLA or APA format) into your Preliminary research log.
3. Then, as you integrate sources into your paper or project, copy and paste the citation from your Preliminary log to your Final log.
4. If you make sure to do this, when you are finished with your writing you will have already completed a formatted reference list!

Taking Notes

Once you have finished reading a source, write down a few notes on how it might fit into your research assignment.

- What is the main theme of the work?
- How does this work relate to other resources on the subject?
- What questions does this resource bring up?
- Do you agree with the author? Why or why not?

Paraphrase (restate information in your own words) rather than copying directly when taking notes. This will help you understand the material and reduce the chances of accidentally committing plagiarism.

If you find something you might want to quote make sure you copy it down exactly and include the name of the source and the page number where it's located.
Incorporating Information from your Sources

Once you've located, evaluated, and organized the sources you plan to use, **how do you integrate them into your work?** There are a few different ways of using information from your sources:

1. **quoting directly:** you quote the source word for word and use "quotation marks" around the text
2. **paraphrasing:** you rephrase or restate one idea or concept in your own words
3. **summarizing:** you condense several ideas or concepts from the source in your own words

Cite your Sources

Remember, even when you are just summarizing or paraphrasing information you still need to make sure you provide proper citations.

Quoting

When you use a phrase, sentence, or paragraph from a source in your own work, it is considered a direct quotation of that source.

**When should you quote?**

- Direct quotes might seem like a simple way to incorporate your research into your writing, but they should only be used if there's something special about the language used (i.e. if it is especially well phrased or grammatically important.)
- The quotation from the source should be accompanied by your own analysis. Don't let a quotation stand in for your own explanation.
- Make sure your quotations correctly represent what the author was saying. Don't quote someone out of context or in a way that they can be misinterpreted.
- Don't forget to cite the original source of your quotation, including the page number(s).

Paraphrasing

Paraphrasing is restating information or an idea from a source in your own words.

**When should you paraphrase?**

- Paraphrasing is more than simply replacing a few words with synonyms - this still counts as plagiarism.
- Try to rephrase the information in a way that reflects the tone and flow of your own writing and in words that you understand.
- You'll want to use approximately the same amount of text to restate the original idea or information.
- You also need to convey the same sentiment or idea that the author originally intended.
- Don't forget to cite the source, including the page number(s) - the in-text citation will go after your paraphrased text.
Summarizing

Summarizing is condensing the information from a source and presenting the main ideas in your own words.

When should you summarize?

- Summarize a source if you want to condense several ideas from a source into one or two sentences.
- You may not need to provide as much detail or description as the source provides and in this case you can provide a simpler or more basic overview of the information.
- If a source describes both relevant and non-relevant information for your own paper or project, you can summarize only the relevant information you want to use.
- Don't forget to cite the source, including the page number(s).

Examples of Incorporating Information

Consider the following passage:

In the 1950s, many women's prisons had nurseries in which infants could stay with their mothers from several weeks to two years, depending on the institution. Within two decades, every state except New York closed them. According to authors James Bourdouris and Mary Hawkes, the nurseries were deemed too expensive, the mothers too derelict and the babies too precious for such an environment. The problem, however, seemed inconsequential. In 1970, there were fewer than 6,000 women in prison, according to the Bureau of Justice Statistics (BJS). Further, families were more stable and structured, so when mothers went to prison, their children were more likely to remain within a recognizable family unit.


How might you include this information in a paper?

Direct Quote:

"In the 1950s, many women's prisons had nurseries in which infants could stay with their mothers from several weeks to two years, depending on the institution" (Kauffman, 62).

For a direct quote, the exact text should be used and in quotation marks, followed by the author's name and page number in parentheses

Paraphrase:

In earlier decades, child care was provided in some prisons. Over the next few decades, most institutions eliminated child care because prison was not deemed an appropriate environment for children, mothers were not able to provide adequate care, and the overall cost of child care was prohibitive. By the 1970s, children were more likely to be left in the care of family members outside the institution (Kauffman 62-63).

Paraphrasing a source means going into the same level of detail as the original, but restating the information in your own language. The in-text citation goes at the end of the paragraph in which you use the paraphrased material.
Summary:

According to Kauffman, nurseries existed in many women's prisons at mid-century, but over the years, the trend was for children to be left in the care of family members, rather than stay with institutionalized mothers (62-63).

A summary condenses a larger passage of text. In this case, the cited passage begins with a reference to the author, Kauffman, and ends with the source page numbers in parenthesis. This method of encompassing the summarized text makes it easy to integrate this source into the body of your paper.

Citation

In academic research when we use information from other people we give credit to the original author. This process is called citation. Citations include author, title, publication information, and anything else necessary to help the reader locate the original source.


Why do we cite?

- Citation allows people reading your work to find the original sources if they want to learn more about something.
- Citation gives people credit for the work they did - you're not taking credit for someone else's work.
- When you cite other people's work it shows that you have done your research and that your arguments are based on a strong foundation.
- If you don't cite properly, you are committing plagiarism and risk academic or even legal repercussions.

You should cite any information you got from reading other people's work. This includes...

- direct quotations
- information you summarize or paraphrase from your sources.
- any references to the work of others.

A good general rule is to cite any information you didn't know before you started doing research.
Citation Style Guides

There are a few different formats for citation in academic writing depending on your academic discipline. Some examples include:

- **American Psychological Association** (APA): sociology, psychology, and some sciences
- **Modern Language Association** (MLA): literature and humanities,
- **Chicago Manual of Style**: humanities and history
- **Council of Science Editors and Council of Biology Editors** (CSE) and (CBE): biology, general sciences and health sciences

To find examples of common citation styles, check your college library's website for links, or use your college learning or writing center to get help with proper citation format. If you are not sure which format to use, ask your faculty member.

Plagiarism

Plagiarism is when you present someone else's work or ideas as your own. Plagiarism can be accidental or intentional. Plagiarism is taken very seriously as a form of academic misconduct and it is very important to make sure that you acknowledge when information you are presenting comes from other people.

Plagiarism can be:

- copying someone's words without giving them credit.
- quoting somebody's words incorrectly or out of context.
- using or repeating someone's ideas or concepts without giving them credit.
- misrepresenting someone's ideas or concepts.
- copying images or music without permission or without proper attribution.
- citing incorrectly - i.e. citing the wrong source or having incomplete or inaccurate citations.
- intentionally presenting someone else's work as your own - e.g. cheating off of a fellow students' work, submitting papers you didn't write, etc...
- failing to acknowledge the contribution of others in work produced collaboratively.

Let the Writing Begin

Once the full picture of your paper or project takes shape, you may see gaps or be missing essential pieces of information. Returning to library and Web-based resources to gather additional sources is a common part of the research and writing process. If you need help at any point during the research process, never hesitate to ask questions and ask for help.

After you have **gathered, organized, and analyzed your sources**, you can begin the process of outlining and writing your paper or assignment.
Try it Out!

Now let’s see if you can tell the difference between different ways of incorporating information from sources into your writing.

In the following exercise, you will see a block of text, and then be shown examples of ways that that information could be used in an academic paper. Your job is to tell whether each example is a direct quote, summary, or paraphrase

First, read, the original source text...

For most of the women, imprisonment meant an almost total loss of freedom in many basic decisions and activities of everyday life. Surviving the difficult routine required some source of hope or meaning, which the women often described as their motherhood. The women used to cope with daily difficulties by thinking about their children and their relationship with them in prison, as well as by planning for their future relationship after their release: “What enabled me to cope was the endless thinking about my daughter.” “The only hope was these two children. This gave me a reason to get up in the morning.”

Analyzing the women's descriptions elicits four forms in which motherhood is experienced as a motive for survival: (a) the children as boundaries of sanity; (b) the struggle to maintain contact with the children; (c) taking care of other women's children within the prison; and (d) acknowledging motherhood. Some women used more than one of these motives.


Example #1

"Surviving the difficult routine required some source of hope or meaning, which the women often described as their motherhood." (Samai, 327-328)

This is a... summary paraphrase direct quote

Example #2

Women who are incarcerated frequently feel a loss of basic freedoms, as well as the loss of support and relationships which help them cope with daily life. Most use the concept of motherhood to help them stay connected with their lives and families outside of prison; this shared identity takes many forms, but overall helps the women survive the prison experience and plan for their lives after release. (Samai, 327-328)

This is a... summary paraphrase direct quote

Example #3

Imprisonment means not only a loss of freedom, but a loss of the support and connection through relationships which help women cope with daily life. Many women think about their children and relationships as a way to maintain a sense of sanity and hope throughout incarceration. There are four basic forms in which the concept of motherhood can be identified as a method for coping with the prison experience: children as a means of maintaining sanity, problems with contacting and communicating with children, caring for other women’s children while in prison, and identifying with the concept of motherhood in general. Women often use a combination of these techniques. (Samai, 327-328)

This is a... summary paraphrase direct quote

Good Job! Learning how to properly use information from your sources and cite the work of others will lend credibility to your own work and help you avoid accidental plagiarism.