



RESEARCH

TAKES TIME AND ENERGY!

**We are in the midst  
of an infodemic  
that imperils our abilities  
to make informed decisions,  
which includes how to  
determine reliable resources  
we find on the internet.**

**Being a happy, healthy, responsible and  
well-informed human being starts now.**



# Topic and Focus

Where do your **interests** lie? What makes you **curious**? What **social issue** concerns you? Think of a **big question** you **wonder** about, then try using the five w's to narrow it to a focus of research.

**The first reading you do is not meant to provide your final answer**, but rather to help you better understand your question.

**Background reading sheds light on what you will need to know** and may help narrow or redirect your focus of research.

Broadly speaking, you can search three distinct places:



Google



TIP:

When searching books, use broader terms than you do for articles.



Books are great for both **general and highly specific information.**

**Your school ID card now serves as your Burbank Public Library card!**

See the tutorial video on the Library Classroom.

You can still **get books from the school library.** However, **the public library** has a much bigger (and more up-to-date) non-fiction selection.

**No contact pick-up and ebooks**

# GOOGLE

VS

# DATABASE

**Popular sources** - intended for general audience, provide general information using everyday language, no or few references provided. Authors are journalists or freelance.

**Contains sponsors and ads.**

**Searches return an overwhelming number of results** with no easy way to figure out which really relate to your topic.

**Anyone can create a webpage**, therefore, quality is always in question.

**You are responsible for determining the relevancy, legitimacy, and origin** of the information you find.

**Scholarly sources** - intended for use in research, to share studies, contain specialized vocabulary and reference to sources - leading to more ways to search your topic. Authors are experts or scholars.

**No sponsors or ads.**

**Provide access to high quality, up-to-date information** from respected publishers and publications.

**You can virtually guarantee that all materials retrieved will be appropriate** for your research paper.

**Most databases have a citation feature!**

# Put on Your Detective Hat!

As you begin to find information:



1. **Keep an eye out for “big names” in your research area**, key people and organizations. Notice the names of people often quoted in the news. Scholars who are doing research on your topic and the universities with which they are affiliated. Spokespersons or influential figures.
2. **Then search for books and articles written by them.** Check bibliographies and footnotes of books and articles you come across.
3. **Find out if there is a local or national organization related to your topic.** See what info is available on their website. Municipal, state, and federal govt sites tend to post valuable information, including reports and stats.

# You Can't Believe Everything You Read!!

HAD TO SAY IT



# Search Terms

**The quality of your search terms will determine the quality of your results!**

Begin with a **simple search** using **important keywords**.

**Then alter the search terms** and get more specific.

**Use quotation marks if you want the terms in a particular order.**

Once you've identified **expert vocabulary related to your topic**, use those terms in future searches.

**Search a topic multiple times using different words.** Discover which words retrieve the best results. Use successful results to find more search terms.

What terms does the article use?

# The Burbank Public Library Has a Research Tab That Puts *All This at Your Fingertips!*

Archives of Sexuality & Gender: LGBTQ

History and Culture Since 1940

Archives Unbound

Britannica Escolar

Britannica School

Burbank in Focus

CultureGrams

EBSCOhost (MasterFILE Complete)

Entertainment Industry Magazine Archive

Explora Student Research

Historical Los Angeles Times

Historical New York Times

Los Angeles Times

Merck Manual

New York Times

ProQuest Central Student

ProQuest eLibrary

ProQuest Newsstand

Research Paper Help

Social Issues Resource Series (SIRS)

Researcher

EBSCOhost and ProQuest are great places to start

# databases

Searching a database is **NOT** like searching Google  
**Databases allow you to efficiently search for published information.**

“Natural language” or long phrase searches will find results in Google but you’ll need a different approach when using a database.

Take time to **brainstorm search terms, synonyms, different ways of describing the same thing.** Identify **key words and short phrases.**

Avoid using generic, non-essential words (effects, impact, influence, reasons, etc.)

# Broad to Narrow!

If you start with a complicated search, you will probably get a very few number of articles. Much better off to **start with a general search and then refine from there.**

EX: If you are researching **various aspects of the subject of obesity**, start with a simple search just on the term **obesity**. Enter this one concept and analyze the results

## Ask yourself:

1. How much information is available on my topic?
2. Are there better terms that I could be using?
3. Will I need to narrow or expand my topic?

Most articles are assigned many **subject headings**. You can determine relevant subject headings by finding an article or two that deal directly with your topic. Then do a search on the subject heading assigned to those articles.

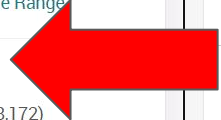
Apps Aeries Alla Prima Painting... Most Reliable and... Virtual Tour JBHS Employee Scr... Bookshelf - MSI Toolbox Curriculum and Les... Lesson plan: How t... Project Look Sharp

Audio & Video Works  
Dissertations & Theses  
Newspapers  
More >

Publication date  
Last 12 Months  
Last 5 Years  
Last 10 Years  
Custom Date Range

Subject  
obesity (198,172)  
diabetes (114,825)  
studies (98,831)  
weight control (64,807)  
humans (61,081)  
More >

Document type  
Language  
Publication title



Wire Feeds  
...disease of **obesity** in the media. The guidelines focus on areas of journalistic...  
...as conducting balanced coverage of **obesity**, using people-first language to...

Abstract/Details Full text Show Abstract v

3 **First Pharmacological Guideline for **Obesity** Treatment Provides Clinical Roadmap for Anti-**Obesity** Drug Treatment: The **Obesity** Society says guideline supplements TOS/AHA/ACC **Obesity** Treatment Guidelines to fill a gap in treatment** Full Text  
PR Newswire; New York [New York]12 Feb 2015.

Wire Feeds  
...practice guid...  
... offers a new tool for...  
... Food and Drug Administration...  
... in (Belviq),...

Show Abstract v

4 **Children with **Obesity**, Consider Fines: The **Obesity** Society** Full Text  
**Proposed bill is misguided and ignores the core scientific**  
**obesity as a disease**  
New York [New York]12 Feb 2015.  
...to address the significant problem of childhood **obesity** in the United States...  
...have proposed a \$500 - \$800 fine for parents whose children have **obesity**...  
... **Obesity** Society (TOS) and The **Obesity** Action Coalition (OAC) go further to call...

Abstract/Details Full text Show Abstract v


5 ****Obesity**: A silent killer. According to the National Family Health Survey 2007, **obesity** has reached epidemic proportions in India in the 21st century, with morbid **obesity** affecting 5% of the country's population while **obesity** hovers above 20%.** Full Text  
Sharma, Sharad.DNA : Daily News & Analysis; Mumbai [Mumbai]27 Oct 2015.  
... " **Obesity** ...

**Subject Headings can be found here and also sometimes in the citation or at the bottom of the article**

**Childhood **Obesity****  
Prevention in Texas: Works ...  
Institute of Medicine; Food and Nutrition Board Washing ...


Show more books >

Videos that match your search



2 min

**Childhood **obesity****  
Smart Engage. Multimedia Library; Johns Creek Johns Creek: Ebix Inc. (May 20, 2019)



Show all x

# CLARIFY - Key Words

Think of key words as how you might 'tag' your topic.

Consider what information you're actually looking for.

Start with the **most important two or three words that identify the main concepts within your topic.** Identify key concepts and terms related to your topic area.

Think also of **synonyms, broader terms, related terms, alternative terms, and narrower terms.**

**EX:** How does **working at home** affect employee **productivity**?

Working at home can also be called **telecommuting** or **virtual office**

Productivity can also be referred to as **output**

# Connectors

When you want to **combine search terms**, you will need to use **connectors**, also known as Boolean Operators

**EX:** If you are researching **ways to combat obesity**, you split your search into two concepts: **combat** and **obesity**.  
Next, you need to **connect these terms**.

Effective use of these connectors is essential to conducting a **useful and time efficient search**.

Use connectors to **specify relationships between search terms**:

**NOT** and **AND** will *narrow* your search  
**OR** will *broaden* your search

# AND

Usually used to **link different aspects of your research question together.**

Tells the database to return results that include  
**both terms somewhere in the article.**

Will **NARROW your results** and **retrieve a smaller set of results.**

**EX:** searching “climate change” **and** pollution finds  
only articles that contain both terms.

# OR

Usually used to **link synonymous terms or concepts.**

Tells the database to return results that include **either term somewhere in the article.**

Will **EXPAND** your search and generally **retrieve more results.**

**EX:** searching “global warming” **or** “greenhouse effect” finds all articles that contain either of these phrases in them.

# NOT

Tells the database to return **results that do not include a certain term or keyword**

**NARROWS** your results and **eliminates irrelevant results or results not included within your topic.**

**EX:** if you want to search the topic obesity but not how fast food relates to obesity, you would exclude articles that have the terms fast food by searching **obesity NOT fast-food**

# exact phrase

**QUOTATIONS** are used to find **multi-word terms in exact order**.

If you simply search the phrase, it will give you all results where either term is used, either next to each other or widely separated.

Works best when phrases are well-known, short and represent a single concept.

**EX:** searching “global warming” finds only results where the two words appear side by side rather than every instance of global and every instance of warming.

# parentheses

**PARENTHESES** are used to specify  
**the order in which terms are interpreted.**

Information inside parentheses is read first, then terms outside.

Especially useful when using the OR operator between similar concepts.

**EX:** searching (ethics or morality) and cloning retrieves  
articles with either ethics or morality AND the keyword cloning

# truncation aka wildcards

**TRUNCATION** is used to **include various word endings and spellings.**

To use truncation, enter the **root of a word** and put the truncation, or wildcard, symbol \* at the end.

**EX:** child\* = child, childs, children, childrens, childhood

# basic limiters

**Narrow and focus** your search using **limiters** or **filters**.

This gives you a smaller list of more relevant sources.

It's often best to explore and determine which keywords work well for your topic before applying too many limiters.

You may want to start with basic limiters such as

**full text, scholarly journals, peer reviewed,**

or type of document such as **article**.

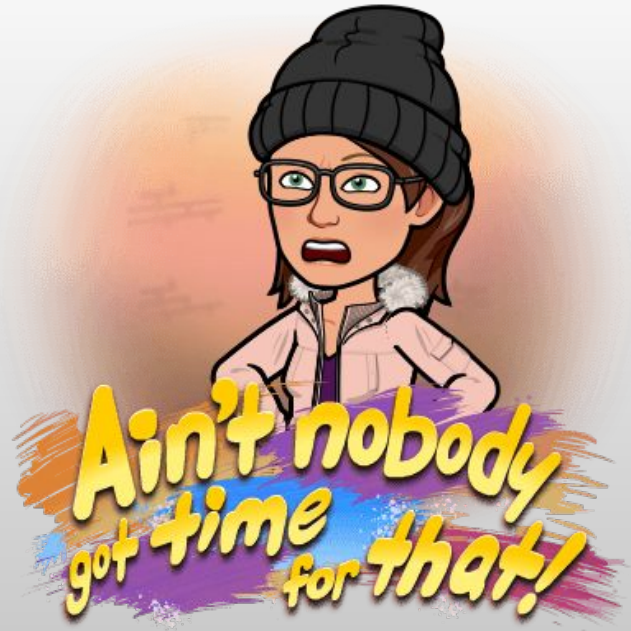
You can also limit to **date ranges** or **particular journals**.

There will **never be one perfect search for your topic.**

It may take dozens of searches to retrieve all the necessary information.

Finding too many or too few search results can be ***really frustrating!***

Before you get too discouraged, try one (or more) of the following tips to get unstuck...



Above all, **be flexible in your searching.** If one term doesn't work, try another. Approach your topic using **as many search strategies** as you can think of. **Use your imagination to think of all the possible ways to express your topic.**

# too many results?

**Find better search terms or keywords.** Think of terms that are more specific and focused. Using more terms will retrieve fewer results. Try specialized vocabulary or names found within the articles.

**Do not use OR between terms.** Using or will retrieve instances of either word rather than both. It broadens your search.

**Use limiters.** These will give you more specific results, such as date or resource type.

**Narrow your topic.** Think about a more focused aspect of your topic.

**Consider a more advanced search.** By default, most databases search in the title, author, abstract and subject fields. Experiment with searching in just the title or subject field in order to get more specific results.

# too few results?

**Change your search terms. Brainstorm new keywords.** Replace terms you've been using with synonyms, similar or related terms.

**Broaden your topic.** Take a step back.

**Use fewer search terms.** Each time you put in another search term, you will get fewer results. Begin with fewer keywords and add more gradually, or try different terms based on your results.

**Use fewer limiters.** Try using only limiters that are absolutely necessary.

# RECAP

**Now you know how to create an effective first search:**

Choose the most important 2 or 3 keywords or short, common phrases.

Consider synonyms and other terms shown in your results.

Use AND to narrow, OR to broaden your results.

Use quotation marks to search an exact phrase.

Include basic limiters to focus your search.

**If you get stuck, don't spend all day with a futile search!  
Ask your teacher or librarian for help! We are here to help you!!**

# Evaluation

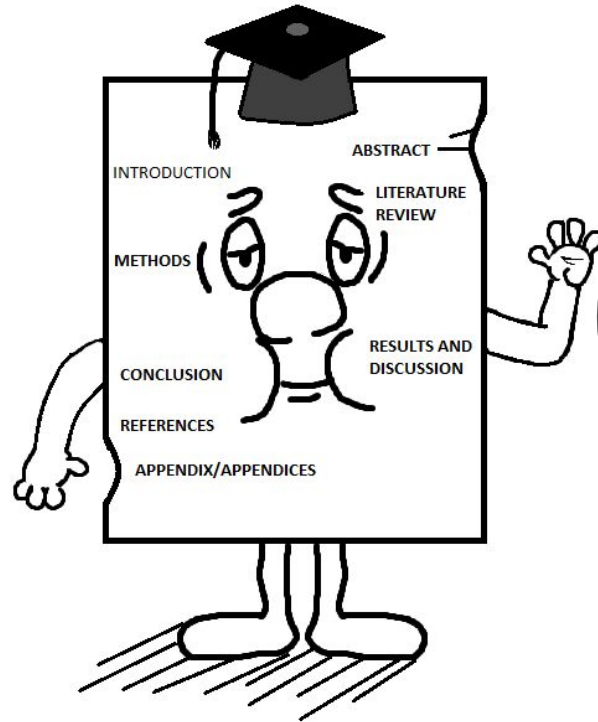
Read the **abstract**  
Avoid difficult articles if you do not understand as you skim

Read the **title**

Consult the **reference section** for other resources

Review **graphs, charts, and illustrations**

## **Anatomy of an Article: The Scholarly Article**



Read the **discussion section**

Use a **dictionary** to define terms in the article

Read the **conclusion**

Reading this way will inform you about the article without reading the whole thing!

**Still want to use Google?**

**It's not all bad, but be prepared  
to do a LOT more digging!!**

Like so many skills,  
website evaluation is something people  
can become fluent at with practice.

Thinking Critically = not believing everything  
you read, not simply settling for any source of  
information, and always questioning!

**Future job as a professional Fact-Checker?**

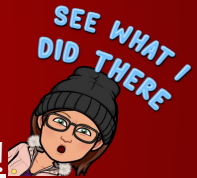




[https://www.google.com/advanced\\_search](https://www.google.com/advanced_search)

If you use Google for research, start with  
**Google Scholar or Advanced Search**  
This will save you both time and frustration.

But the easiest, most reliable place to start is a database!



Be very careful using the freely available web!  
You risk finding web pages that contain  
**potentially biased information from unreliable and unverifiable sources.**  
**You have to dig through a lot to find acceptable sources.**

# PRACTICE CLICK RESTRAINT

Google's **page ranking algorithm** is complex and some sites use search **results optimization** so it's advantageous to **look beyond the first few results!!** Helps you avoid "rabbit holes" and misleading information.

**Scan results** looking at things like title, source description, and featured sections **before deciding what sources to examine.**

**Take a look at the URL** above the headline and use some intuition -

Does the URL look like a well-known site?

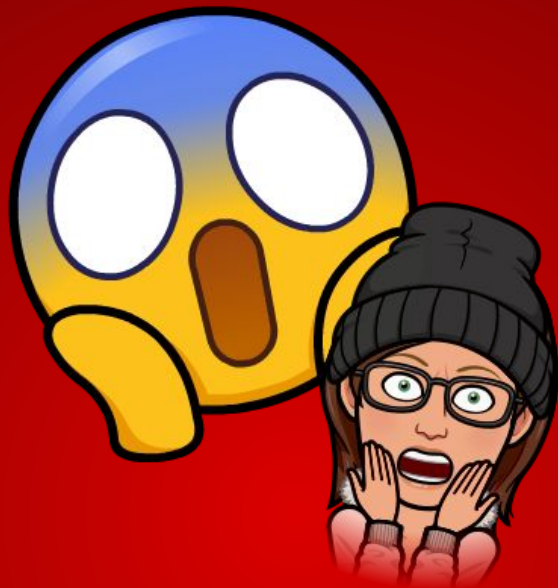
Is it a forum or opinion site?

Is it an educational (.edu) or government (.gov) institution?

Look for the word sponsored or ad

Note: anyone can now purchase a .org so that is not as reliable as it once was

**This is just the beginning!**



## **Check your emotions.**

**Do you have a strong reaction** to the information you see?

If so, slow down before you share or use that information.

We tend to react quickly and with less thought to things that evoke strong feelings. By pausing, you give our brain time to process your initial response and to analyze the information more critically.

# Lateral Reading is what professional Fact Checkers Do!!

This is the practice of **doing a quick initial evaluation** by spending **little time on the site itself** and **more time reading what others say** about the source or related issue.

**Cross check the information**  
on two or three different sites before assuming it's accurate.

It's essential to consider multiple perspectives  
and to **find information that is corroborated elsewhere.**

**Keep your initial search on one tab to keep them handy.**

**Open your investigative searches on new tabs**  
so you can easily refer to each.

# S.I.F.T.

**STOP:** Pause and ask yourself if you recognize the information source and if you know anything about the website or the claim's reputation.

**INVESTIGATE:** the source.

Take a minute to identify where it comes from, the creator's expertise and agenda. Is it worth your time?

**FIND** trusted coverage.

Sometimes it's less important to know the source and more important to access their claim. Compare information across sources and determine whether there appears to be a consensus.

**TRACE** the claims, quotes, and media back to the original context.

Sometimes information has been removed from its original context. For example, a news story is reported on another online publication or a photo is posted on Twitter.

# INVESTIGATE

**Check for previous work.** Has someone already fact-checked the claim or analyzed the research? Search the internet for other coverage of the claim. Consider where that coverage comes from.

**Go upstream to the source.** Is this the original source of the information or is this a re-publication or interpretation of previously published work? Are you examining an original source? If not, trace back to it.

**Read laterally.** What are others saying about the original source and about its claim? Search Google for [WEBSITE URL] site: -[WEBSITE URL]  
EX: newyorktimes.com site: -newyorktimes.com

**Circle back.** If you hit a dead end, what other terms or strategies might lead you to what you need?

# VERIFY IMAGES

**Check the origins of an image.** If you find an image on a web page or social media site like Twitter and are unsure of the authenticity, you can check its origins with a **reverse image search**.

In Chrome browser, right-click on the image and select 'search Google for image' The image search results will show you other places where the image has appeared. Examine these results to see if there are any discussions about the trustworthiness or origins of the image.

Even after you do this, you still must **evaluate** these results. Do they provide evidence to support the claim of whether the image is real or not?

# A Word About **Satire**



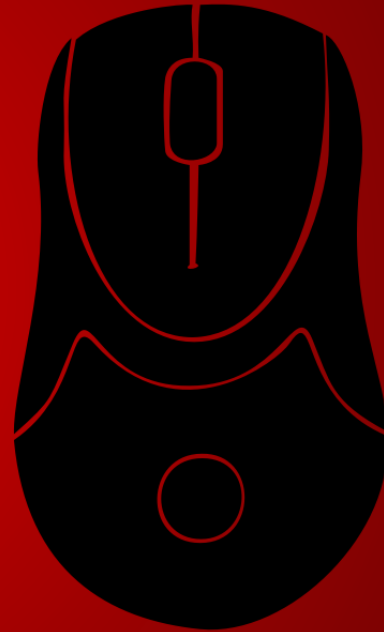
sat•ire    noun

1. The use of humor, irony, exaggeration, or ridicule to expose and criticize people's stupidity or vices, particularly in the context of contemporary politics and other topical issues.

Instances of satire can go viral.  
Remember, verification of content and source  
is the same as other forms of misinformation.

Explore  
Read  
Investigate  
Verify

Before You Share!



# EVALUATE

Once you click on a link and land on a site,  
how do you know it offers information you need?

**Look for the search box on a webpage (or Control F** to bring up a search box that can scan the page). **Type in terms** used in your research and it will tell you if the page contains these terms. Determine if it answers your question and if the site *might* be useful to you.

**Skim read** to be sure you understand the language and terms being used.

They say you can't judge a book by its cover but **you can sometimes judge a website** - is it cluttered with ads or difficult to navigate? Are there grammar and spelling errors? Do they cite where facts come from or link to other sources?

## **Consider the purpose of the site.**

Is the author trying to make you think a certain way?

Are they biased or one-sided?

Are they trying to sell you something? Sometimes it is not obvious.

Do the headlines match the article or do they simply serve to hook the reader?

**Is the author trying to educate the audience and present a balanced, factual picture? This is what you want to look for.**

**Look for the date.** It may or may not matter, depending on your topic. Look to see how often it's been updated.

## **Check the author.**

Caution: like Instagram profiles, an About page is a curated profile of how people and organizations want to be perceived. Search the author to find if they have written anything else.

# If the site is no good, bounce back....

If you're in doubt,  
**head back to your original results tab to check out other sites.**

**You may need to adjust your terms,  
change your keywords  
or be more specific.**



# Citation

Remember, you will need to cite your sources!

**Databases generally have a  
cite tab that does the work for you!**

Easybib.com has a citation generator for  
books, websites and more

# Putting It All Together

**Example 1 Topic:** You are writing a paper looking at the movement for human rights in China

**Google Search:** What is the current status of human rights in China?

**Keywords:** human rights, civil rights, political rights, political freedom, social freedom, China, The People's Republic of China

**Potential Database Search:** ("human right\*" or "civil right\*") and Chin\*

**Example 2 Topic:** You are writing a persuasive pro/con paper on the issue of corporate farming and animal rights

**Google Search:** What is a corporate farm and how are animal rights affected?

**Keywords:** factory farm, corporate farm, animal rights, animal welfare

**Potential Database Search:** ("animal right\*" or "animal welfare") and ("factory farm\*" or "corporate farm\*")

For constructive feedback on your paper,  
go to [burbanklibrary.com](http://burbanklibrary.com)  
and find Help Now under the Research tab.  
24-hour turn around!

