

# Effective Search Strategies

## PXU Library Services for Students and Staff

Finding quality, reliable information for academic and personal use is a lifelong endeavor. Sometimes online searching can feel like looking for a needle in a very large haystack. Avoid this frustration by using these effective online search strategies. *Visit your high school to get the remote access logon information for the PXU online resources.*

*Here are some YouTube tutorials on developing effective search strategies . . .*



<http://bit.ly/2FIGa96>

Quick Tips & Shortcuts for Database Searching 5:19  
Modern Librarian Memoirs – February 2013



<http://bit.ly/2sBFDhr>

How Can I Develop an Effective Search Strategy? 2:36  
Univ. of Rhode Island Libraries – July 2014



<http://bit.ly/2FGeFwW>

Online Research: Tips for Effective Search Strategies 3:04  
Sarah Clark – January 2016 (Animated)

### Work Smarter, NOT Harder! Use the PXU Databases!

Begin your research with the **PXU Databases** before using a search engine like Google, Bing, and Yahoo. Here are some of the benefits of using the **PXU Databases**:

• <b>Website Evaluation (CRAAP Test)</b>	Search engines like Google and Bing find results based on popularity and relevancy. These search results are not evaluated for accuracy, reliability, and appropriateness. PXU databases will allow you to conduct a search based on relevancy, key concepts, and customized limiters like full-text and peer-reviewed. All these resources have passed website evaluation.
• <b>Citations</b>	Citations in both APA and MLA are provided for information found in the PXU databases.
• <b>Images &amp; Videos (Instructional Materials)</b>	Thousands of instructional videos and high quality images are found in the PXU databases along with citations.
• <b>College &amp; Career Readiness</b>	Gaining experience with the PXU databases contributes to college and career readiness.

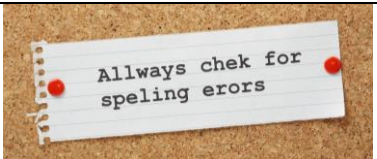

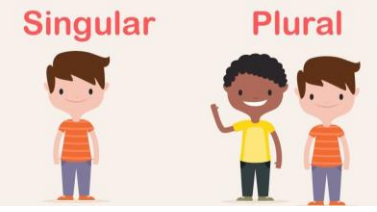



### Developing an Effective Search Strategy

Preparation is key to successfully conducting research. The research process is not an exact science. It is mostly trial and error. Also, remember that it can be a time-consuming process. However, if you are well-prepared, you will significantly limit the amount of time it takes for you to successfully complete your research. Follow these steps to prepare yourself for a positive research experience:

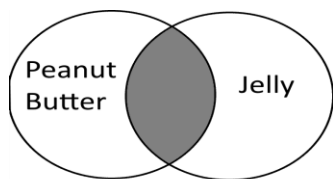
1. <b>Formulate research question</b>	What are you researching? What question(s) are you trying to answer?
2. <b>Identify main concepts/topics/subjects</b>	What are the key areas of your research topic? Think in broad terms.
3. <b>Brainstorm synonyms and related subject terms</b>	These will be the keywords used when you search within the databases.
4. <b>Select relevant databases and resources</b>	Examples: Databases, books, journals, newspapers, videos, etc.
5. <b>Combine search terms with Boolean operators</b>	Combine key concepts – How can you put your search terms together for the best results? Use Boolean operators.
6. <b>Run searches in selected resources</b>	Keep time management in mind. - This is usually a time-consuming process.
7. <b>Review and refine results</b>	Do your information sources seem relevant? You may be required to do more research within different databases, using different search terms. (Repeat process starting at Step #3, if necessary.)

## Search Basics

Always follow these basic tips for searching to find the most relevant results:

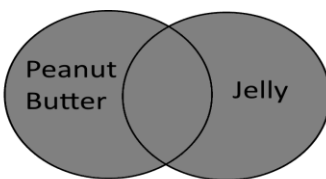
	<p>Use correct spelling! If you didn't get results or too few results, check for spelling errors.</p>
	<p>Do not type searches in the form of a question! Database searches use keywords and search terms, NOT questions.</p>
	<p>Search for both singular or plural forms of your search terms. Examples - volcano OR volcanoes drought OR droughts</p> <p>Tip: Use the <b>wildcard</b> to also get the plural form of your search term – podcast*</p>
	<p>Use the <b>ADVANCED SEARCH</b> feature whenever possible to get more specific results. In Advanced Search you can . . .</p> <ul style="list-style-type: none"> <li>○ Combine search terms with Boolean operators (AND, OR, NOT).</li> <li>○ Filter results by -             <ul style="list-style-type: none"> <li>○ Full-text: PDF or HTML</li> <li>○ Peer-reviewed: scholarly journals research</li> <li>○ Date, subject, publication, format, etc.</li> </ul> </li> </ul>
	<p>MLA and APA formatted citations are provided in the PXU databases. Look for an icon or link that includes the word <b>CITATION</b> or <b>CITE</b>.</p> <ul style="list-style-type: none"> <li>○ MLA – Works Cited Page</li> <li>○ APA – References Page</li> </ul> <p>When using results from a search engine like Google and Bing, you will need to generate citations using EasyBib or Citation Machine.</p> <p><b>TIP: Always have a Word document open so you can copy your source citations as you find them. This will save you time later when you are formatting your Works Cited or References page.</b></p>
	<p><b>Phrase Searching (AKA Phrasal Searching)</b> – Avoid conducting a search that is too broad or too narrow by following these tips:</p> <p>Group relevant search terms together in your search by using <b>QUOTATION MARKS</b> or <b>PARENTHESES</b>. This guarantees that words are adjacent to each other in the results. Use when you need to find an exact phrase, name, or title. Examples -</p> <ul style="list-style-type: none"> <li>○ “ global warming “</li> <li>○ (human rights)</li> <li>○ “Edgar Allan Poe”</li> </ul> <p><b>AVOID</b> these search phrases since they usually have a limiting effect –</p> <ul style="list-style-type: none"> <li>● “Effect* of . . .”</li> <li>● “Result* of . . .”</li> <li>● “Consequence* of . . .”</li> <li>● “Influence of . . . “</li> <li>● “Impact of . . .”</li> </ul>

## Boolean Operators



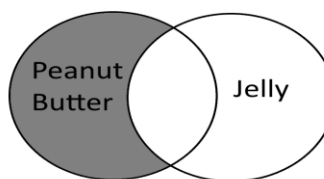
### AND

Using AND, this search would only retrieve results with Peanut Butter and Jelly.



### OR

Using OR, this search would retrieve results with peanut butter, with jelly, and with both.



### NOT

Using NOT, this search would retrieve results with peanut butter, and exclude those with jelly or PB with jelly.

### Boolean Operators – AND, OR, NOT (USE CAPITAL LETTERS)

Used to connect search terms in an Advanced Search.

- **AND – limits search results**  
Caffeine AND “sprint performance”  
Social media AND blogs  
Human AND cloning
- **OR – expands search results by combining similar terms**  
flu OR influenza  
“mine warfare” OR “land mines”  
teen\* OR “young adults”
- **NOT – limits search results**  
Cardinals NOT football  
Social media NOT wikis  
“walking patterns” NOT treadmills

## Wildcards & Truncation

Use wildcard symbols to search for all forms of a search term. (This process is called truncation.)

Use the **ASTERISK** or **STAR** symbol (\*) in place of a **sequence of letters**. Examples -

These wildcard search terms -

child\*      politic\*      advertis\*      gene\*

Will yield results for the following related words -

children      politics      advertise      genes  
childhood      political      advertising      genetic  
politician      advertisement      geneticist  
genetically




- **\*bird** will yield results for love-bird, songbird, and Thunderbird

Use the **QUESTION MARK (?)** in place of **one character**. Examples –

- **wom?n** will yield results for woman and women
- **s?ng** will yield results for sing, song, and sung

## POWER Searching – ABC-CLIO, EBSCO & Gale PowerSearch

Use these PXU Databases to maximize the amount of information included in your search:



	ABC-CLIO covers Social Studies, Geography, Government, History, Issues and Culture from many custom databases. (Used for Social Studies textbook.)
	When conducting an EBSCO search select <b>ACADEMIC SEARCH PREMIER</b> as one of the databases you will use. This database is extremely similar to Academic Search Complete, which is one of the popular sources used in college.
	To search in <b>ALL</b> the GALE research databases at one time, click on the <b>Gale PowerSearch</b> link on the Databases webpage.  PowerSearch will search in all these Gale databases: GALE eBooks, Environmental Studies, Global Issues, Interactive Science, Literature Resource Center, and Gale High School.

### Images & Videos

Don't forget to search for instructional videos and high quality images in the PXU Databases: Videos – **Infobase Videos** and **ProQuest Academic Videos Online (AVON)**; Images – **Britannica ImageQuest**

### Refine Your Search

Assess Your Results – Read/skim the articles to determine if you are getting relevant information. Do the articles seem relevant? The following tips will help you if you need to refine your search for relevant information -

	<p style="text-align: center;"><b><i>Are you getting too many results?</i></b></p> <ul style="list-style-type: none"><li>○ Use Boolean operators – AND &amp; NOT – Both Boolean operators limit search results so you get a smaller, more specific results list by searching with keywords that are connected with AND or NOT.</li><li>○ Are there subject terms in your previous results that may help you refine your search? Analyzing related subject terms will help you refine your search by giving you different keywords to use.</li><li>○ Use the <b>Subject Terms</b> or <b>Thesaurus</b> features in the databases to find related search terms. Different related keywords may help you limit your results.</li></ul>
	<p style="text-align: center;"><b><i>Are you not getting enough information?</i></b></p> <ul style="list-style-type: none"><li>○ Use the Boolean operator – OR – it expands search results by combining similar terms – Get more results by connecting keywords with OR.</li><li>○ Are there subject terms in your previous results that may help you refine your search? Analyzing related subject terms will help you refine your search by giving you different keywords to use. If you are not finding enough information, different keywords may yield more results.</li><li>○ Use the <b>Subject Terms</b> or <b>Thesaurus</b> features in the databases to find related search terms. Different related keywords may help you increase your results.</li></ul>