

Brainstorming Concepts and Keywords

A Research & Library Skills Exercise ♦ 2009-2010

www.lib.umd.edu/UES/engl101/exercises.html



Instructors Name: _____ ENGL 101 Section: _____ Class Meeting Time: _____

Your Name: _____ Date: _____

Breaking your thesis statement apart into main concepts or ideas:

By identifying the main concepts or ideas in your thesis statement, you can search for information more efficiently and effectively when searching the Libraries' catalog, databases linked in Research Port, or the web. When you execute targeted searches for information, you are saving time by not having to sift through lots of irrelevant results. Online library resources almost universally require you to enter ideas, concepts and keywords into search boxes. By conducting your search this way, you are directing a search engine to retrieve information that contains specified information you need.

Step 1 example:	Thesis statement:	<i>Do hybrid cars cut down on oil consumption?</i>
	Concepts/ideas:	hybrid cars oil consumption

After breaking down your thesis statement, you will need to brainstorm additional synonyms or key words:

Step 2 example:	Synonyms for hybrid cars:	hybrid vehicles, hydrogen cars, electric cars
	Synonyms for oil consumption:	gas, fuel consumption, petroleum, petrol


Take your main concepts and synonyms and combine them in a way that will return relevant results.

Step 3 example: **Use *Academic Search Premier*** ...a General/Multidisciplinary database found in Research Port.

Use quotation marks to form a phrase. e.g. "fuel consumption"

See page 5 for more information about combining words using AND and OR

Searching: **Academic Search Premier** | [Choose Databases »](#)

 "hybrid cars" or "hybrid vehicles" in

and

and

[Basic Search](#) | [Advanced Search](#) | [Visual Search](#) | [Search History/Alerts](#) | [Preferences »](#)

The Exercise

Step 1: This exercise will step you through the process of picking out the main concepts or ideas in a thesis statement.

TIP: Cross out words that are in the following categories:

- “small” words. e.g. on, who, the, is, etc.
- statements of timing. e.g. always, sometimes, often etc.
- “fuzzy” words / words that aren’t specific. e.g. should, get, against etc.

Circle the main concepts in each of the following thesis or research statements:

What are ways in which to prevent sports injuries in college students?

How are public Universities being affected by the recession?

Eating chocolate has health benefits.

Step 2: Now, brainstorm synonyms and related keywords. Why? Read this first:

Two hydrogen atoms bumped into each other recently. One said, "Why do you look so sad?" The other responded, "I lost an electron." Concerned, the first one asked, "Are you sure?" The other replied, "I'm positive!"

Not everyone will use the same words in the same context (e.g. positive= meaning "sure" OR "a charged atom, not neutral".) The same thing happens when searching for books or articles. The words that you choose might not be the ones typically or normally used by others.

TIP: Brainstorming synonyms / related keywords

- Consider using the following sources to help you brainstorm:
 - **quintura.com (a visual search engine)**
 - **thesaurus.reference.com**
- Use words for people, places, & things—both the singular & plural forms.
- Avoid using more than 2-word phrases.
- Remember that alternate spellings, capitalization, and even punctuation can be important.
- Consider broader and narrower terms that convey the same ideas in your topic. For example, "Social Networking" is a broader term than "Facebook."
- Use your previous knowledge of the topic to come up with related terms. For example, use the term "Division I" when searching for information about college sports.

Pick 1 of the 3 thesis statements listed on page 2. Brainstorm three synonyms or related keywords for each concept/idea:

Concept/Idea 1:	Concept/Idea 2:

Synonyms / Related Keywords For Concept 1:	Synonyms / Related Keywords For Concept 2:

Now, work through Steps 1 and 2 using your own topic:

Write your research question or thesis statement. It should contain at least two concepts:

Breakdown your thesis statement into its main concepts/ideas (Step 1):

Concept/Idea 1:	Concept/Idea 2:

Brainstorm some synonyms and related terms (Step 2):

Synonyms / Related Keywords For Concept 1:	Synonyms / Related Keywords For Concept 2:

Learn to combine your concepts & keywords into an effective search strategy:

Search Connectors AND and OR: Why is it important to use them?

Catalogs, databases and other search engines contain references to thousands of books and articles. Using special commands to connect your concepts and keywords together will allow you to quickly find information relevant to your topic. Search connectors **AND** and **OR** (also called *Boolean* connectors) help you save time and search more effectively.

Using AND:


In the real world, when you order a meal in a fast-food restaurant, using AND means getting more food. For example, people typically say: *I'd like to order a hamburger AND fries AND a coke.*

When using search engines, AND works differently. AND is used to narrow or target your search. AND connects different concepts/ideas together. AND will find both of your concepts/ ideas in the articles retrieved.

Example: *Imagine you are writing a paper on women in sports.*

AND connects concept 1 to concept 2:

Catalog basic search

choose type of search enter word/s to search  tips

word/s anywhere women AND sports **search**

Visual Representation:



The Exercise:

Circle the search strategies that use **AND** correctly:

animal rights AND legislation

marijuana AND pot

health care AND elderly


college students AND weight

storms AND hurricanes

college AND university

Using your own topic, build an effective search strategy in the box below using **AND** to find books:

Catalog basic search

choose type of search enter word/s to search  tips

word/s anywhere **search**

Using OR:


In the real world, when ordering a soda in a fast-food restaurant, you have an opportunity to decide between different types of drinks. For example, you might be asked: *Do you want to order a coke OR a sprite with your meal?* OR limits your choice.

When using search engines, OR works differently. OR is used to broaden or expand your search. OR connects related or synonymous concepts/ideas together. OR will find either or both of your concepts/ideas in the articles retrieved.

Example: *Imagine you are writing a paper on gender roles.*

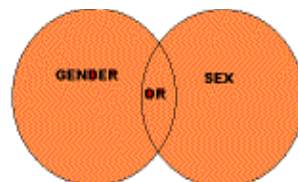
OR connects synonyms together:

Catalog basic search

choose type of search enter word/s to search  tips

word/s anywhere gender OR sex **search**

Visual Representation:



The Exercise:

Circle the search strategies that use OR correctly:

animal rights OR legislation

marijuana OR pot

health care OR elderly


college students OR weight

storms OR hurricanes

college OR university

Using your own topic, build an effective search strategy in the box below using OR to find books:

Catalog basic search

choose type of search enter word/s to search  tips

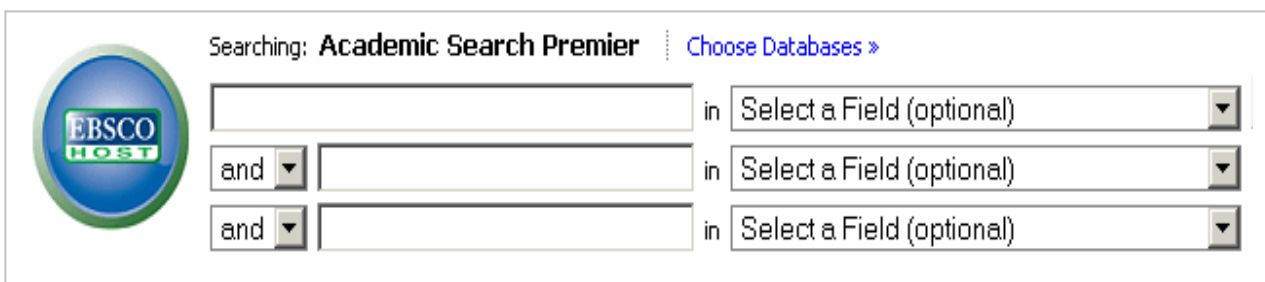
word/s anywhere **search**

Other search strategies:


- Use the **truncation symbol *** to broaden your search to find as many word variations as possible.
e.g. accessib* will find articles that contain the words: **accessible, accessibility, accessibly**
- Use quotation marks to construct phrases.
e.g. “mentoring program”
- When presented with only one search box, use parenthesis to separate AND and OR. If you don’t use (...) the search engine will likely interpret your search strategy differently than you intend.
e.g. (mentoring OR mentor) AND (child* OR kids)

The Exercise:

Using your own topic, build an effective search strategy in *Academic Search Premier* using AND and OR:



Searching: **Academic Search Premier** | [Choose Databases »](#)

 in

in

in

What search strategy would you use in order to get a variety of words starting with this root word:

photo__ would find: _____

Imagine you are searching a database for the phrase, “**hybrid cars.**” How would you expand your search strategy using synonyms to find more results?

How would you construct a search strategy so that you would find all of the following terms in the same article?

birds, dogs, fish: _____

Illustrate how you would construct an effective search using AND, OR and (parentheses) using all of the following concepts and synonyms:

study skills, college students, university students, study habits
