Information Literacy Fundamentals Session #2
Online Searching Concepts

Common Types of Searches

The following information is true in most cases in most databases you will encounter. Some databases offer other types of searches as well.

Keyword
- An uncontrolled vocabulary search
- most dynamic type of search, because it searches in most of the fields in a catalog or index record
- allows use of any word or words (except common stop words), phrases, names, places, etc.
- will produce list of records related to the terms entered in the search – usually about something or someone.
- best search to perform when you need information about something

Author
- requires that you know what author you are looking for
- must enter at least the last name of an author
  - if it is a common name like “Smith” you will also need to provide a first name and possibly even a middle initial/name if first name is also common, such as “John Smith.”
- searches the author fields in catalog or index records
- produces list of books, articles, etc. by the author you searched
- best search to perform when you know who the author is and need to see what is available by that author

Title
- requires that you know the title or at least part of the title you are looking for
- may enter entire or partial title
- searches the title fields in catalog or index records
- produces list of books with titles exactly or at least similar to the terms you searched
- best search to perform when you know the title of the item and need to see if it is available or what editions or formats are available for that title

Subject
- a controlled vocabulary search
- requires use of words, names, places that match subject terms established by the Library of Congress, also known as “subject headings”
- may enter all or part of a known subject heading
- produces list of items about the subject you searched
- if search is on an author, list of items is produced both about and by the author
- like the keyword search, is a search you can do when you need information about something or someone
# Search Strategy Worksheet

1. Briefly summarize your search topic:


2. Divide your topic into major concepts. Write them on the bolded lines below, in order of their importance.

3. Under each major concept list synonymous or related terms/concepts.

<table>
<thead>
<tr>
<th>First Major Concept</th>
<th>Second Major Concept</th>
<th>Third Major Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>__________________</td>
<td>__________________</td>
<td>__________________</td>
</tr>
<tr>
<td>or</td>
<td>or</td>
<td>or</td>
</tr>
<tr>
<td>__________________</td>
<td>__________________</td>
<td>__________________</td>
</tr>
<tr>
<td>or</td>
<td>or</td>
<td>or</td>
</tr>
<tr>
<td>__________________</td>
<td>__________________</td>
<td>__________________</td>
</tr>
<tr>
<td>or</td>
<td>or</td>
<td>or</td>
</tr>
<tr>
<td>__________________</td>
<td>__________________</td>
<td>__________________</td>
</tr>
<tr>
<td>or</td>
<td>or</td>
<td>or</td>
</tr>
</tbody>
</table>
The **Boolean operators** AND, OR and NOT are used to combine words and phrases when performing online searches to place specific conditions on a set of documents to be retrieved. The process is named after George Boole (1815-64), who was an English mathematician and logician. Many online databases and World Wide Web search engines accommodate the use of Boolean operators in information searches; however, there may be slight differences from resource to resource in how they are used. Follow the instructions in the searching tips and help sections for each separate resource.

**AND**

- Retrieves documents containing all terms specified in the search
- Eliminates documents that have only one among any of the terms specified in the search
- Narrows your search, and documents retrieved tend to be more relevant

In most online environments, AND is understood, so it is not necessary to type out AND unless you just want to.

The shaded area in the diagram below illustrates that the documents retrieved contain both cats and dogs.
OR

- Retrieves documents containing all terms specified in the search together or separately.
- The rule of thumb in using “or” is to remember that “or gets more.”
- Broadens your search, and documents retrieved tend to be less relevant.
- Usually used for combining synonyms and closely related terms

The shaded area in the diagram below illustrates that the documents retrieved contain the terms individually as well as together.

```
Cats OR feline
```

cats

feline

NOT

- Eliminates specific aspects of a broader term or concept in a search

The shaded area in the diagram below illustrates that the documents retrieved contain information about any sonnet other than those written by Shakespeare.

```
Sonnets NOT Shakespeare
```

sonnets

Shakespeare
Using Parentheses, Quotation Marks, and Wild Cards in Online Searching

Parentheses ( )

Parentheses should be used in Boolean phrase searching when multiple Boolean operators are being used in the same search.

Examples:

- (cats OR feline) AND instincts
- (cats OR feline) AND (instincts OR behavior)

Quotation Marks “”

Quotation marks should be used when searching exact phrases. This ensures that the results will show only documents that have the exact phrase in them.

Example:

- “new mexico” AND politics – without the quotation marks the results may include irrelevant documents that have NEW and MEXICO separated from each other within the document.

Wild Cards *

Wild card symbols are used in online searching in order to avoid having to search separately on various manifestations or forms of words that you would want to have included in the search results, such as plural forms of words.

Although there are many wild card symbols that function in different ways, the asterisk * is one of the most common. You may consult the “Help” screens in individual online databases to see how different wild cards function. The asterisk * is used to truncate words, by placing the asterisk at the end of the part of the word that is the same in all of the desired forms of the word that you want to have included in the search results.

Example: compute* - will include compute, computes, computer, computers, computerize, computerizes, etc. in the set of results.

To avoid getting thousands of irrelevant results, truncated terms should always be combined with at least one other term relevant to your topic.

Example: compute* AND future technolog*