# South Eastern Kenya University Library

# Developing a Search Strategy and search techniques

## What is a search strategy?

A search strategy is a logical series of steps for planning and preparing an efficient way to collect information on a given topic.

A search strategy shows how these terms combine in order to retrieve the best results. Different databases work in different ways, so you need to adapt your search strategy for each of the databases you use.

# Building a search strategy

• Databases have several features that will allow you to build searches that will focus your search to relevant information. These features include search techniques that will allow you to search more efficiently and effectively.

# The process of building a search strategy

- Identify the main concepts or keywords
- Based on your keywords identify any synonyms or alternative ways to express the concepts.
- Combine the concepts/ keywords

# Search Techniques

- The key to being a savvy online searcher is to use common search techniques that you can apply to almost any database, including article databases, online catalogue and even commercial search engines.
- This is important because searching library databases is a bit different from searching Google.
- The techniques described in this section will enable you to quickly retrieve relevant information from the thousands of records in a database.

# Search Techniques

#### Keyword Searching

- ✓ Database looks for keywords anywhere in the record (title, author, subject headings, publisher etc.).
- ✓ A good substitute for subject, title or author search when you have their incomplete information.
- Pre-set Limits can be selected before doing a keyword search using the Boolean operators to avoid many irrelevant results.

### Subject searching

- ✓ Pre-defined "controlled vocabulary" words assigned to describe the content of each item in a database or catalogue.
- ✓ Database looks for subjects only in the subject heading or descriptor field, where the most relevant words appear.
- ✓ If a subject heading search yields too many results, you can often select subheadings to focus on one aspect of the broader subject.

### Comparison of Keyword and Subject Searching

#### **Keyword Searching**

#### Advantages

- most inclusive
- searches for almost any word in a record

#### Disadvantages

- can find too many records
- often finds irrelevant records.
- you have to think of and enter all possible terms into the search box

#### **Subject Searching**

#### Advantages

- fewer records to look at
- more accurate results

#### Disadvantages

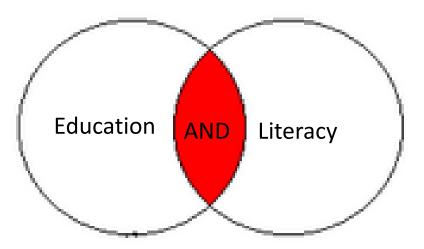
 can be difficult to figure out what terms to use (Example: is it *First World War* or *World War I* or *World War 1* or *World War One*?

#### Boolean operators

#### 'AND' operator

- ✓ retrieves records that include both terms
- ✓ narrows your search
- ✓ used for terms or concepts that are not related

results will contain education and literacy

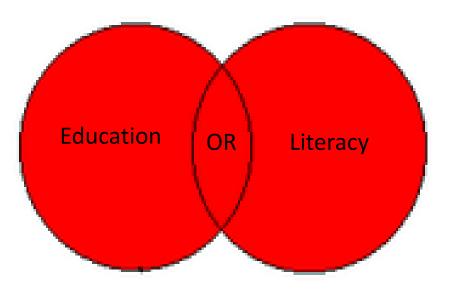


# Boolean operators cont...

#### OR' operator

- ✓ retrieves records that include either of the terms
- $\checkmark$  broadens your search
- ✓ used for related terms or concept

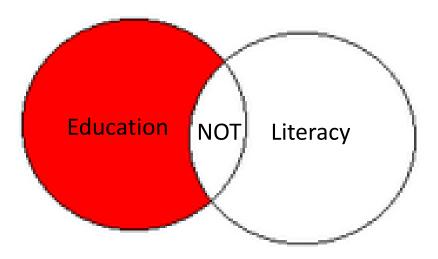
results will contain either education or literacy



# Boolean operators cont...

#### 'NOT' operator

- ✓ retrieves records that include one term but not another term; eliminates all the records containing the second term
- $\checkmark$  narrows your search
- ✓ may eliminate relevant records results will contain education but not literacy



### Phrase Searching

Phrase Searching means searching for two or more words as an exact phrase.

In order to search for an exact phrase you must enclose the words of that phrase in quotation marks.

A phrase search will then locate only records containing the words *in the particular order in which they appear*.

# Example of phrase searching

"Climate change" "Climate change" finds fewer records than climate change without the quotation marks since it would not find a phrase such as change in the climate.

# Truncation and Wildcards

#### Truncation

- A search technique that use symbols to create searches where you want to retrieve variants or plurals of a word stem.
- Useful for finding singular and plural forms of words and variant endings.

#### Wildcards

• A wildcard symbol is used within a word to provide for all possible spellings or variations inside a word or word stem.

### Truncation and Wildcards cont...

#### Truncation

#### **Examples:**

 adolescen\* retrieves adolescent, adolescents, or adolescence

#### Wildcards

#### **Examples:**

- wom#n retrieves woman or women
- teen#### would retrieve teens and teenager and teenagers

### Proximity searching

- Many databases allow you to specify that the words you are searching are within a certain proximity of each other.
- Proximity operators are more specific than Boolean operators and make your search more precise.
- Proximity operators also vary by database, but some common ones include: w# = with

### Proximity operators cont...

#### w# = with

- With specifies that words appear in the order you type them in.
- Substitute the # with a number of words that may appear in between. If no number is given, then it specifies an exact phrase.
- Examples:

#### n# = near

- Near specifies that the words may appear in any order.
- Substitute the # with a number of words that may appear in between.
- Examples:

# Proximity operators cont...

#### n# = near

Examples: genetic w engineering (searches the phrase genetic engineering) Hillary w2 Clinton (retrieves Hillary Clinton, Hillary Rodham Clinton, etc.)

#### w# = with

• Examples: cloning n3 human (retrieves cloning of humans, human cloning etc.)

