

#### UNIVERSITY OF CAPE COAST

College of Humanities and Legal Studies Faculty of Arts

Information Literacy Skills Unit

# ILT 101 INFORMATION LITERACY SKILLS

Session 7: INTERNET SEARCH STRATEGIES

#### GENERAL OBJECTIVE

#### This session aims to:

- Increase the students' Information searching skills
- Equip students' with skills and knowledge on tools available for searching information on the Internet
- Equip students' with skills to evaluate information on the Internet

## Steps to effective Searching

- 1. Define your information need
- 2. Choose your search terms
- 3. Decide on which sources to use
- 4. Find out how the search tool functions
- 5. Run your search
- 6. Review and refine your search

#### Note:

Steps 1-3 can be done away from the computer

## Internet searching



Dec Servers



### Step 1: Define your information need

- What sort of information are you looking for?
- — Specific information, e.g. a fact or date
  - Reference source, e.g. data book, encyclopaedia, dictionary, the Web or even a textbook are usually best.
- General information, e.g. research areas
  - May require more thought, including how much information is needed and at what depth
- Who is going to use the information?
- Researcher? Academic? First year student?
  - These might affect which sort of information you require

### Step 2: Choose your search terms

- What unique words do you think will appear in the site/article you want?
- Are there any key phrases?
- Are there any synonyms, alternative spellings, plurals or capitals that you need to consider
- What broader topic is it a part of or related to?

#### AN EXPLAINED EXAMPLE

I want to find information about the health implications of water pollution

- •Keywords—'water' 'pollution' 'health'
- •Broader topics—'environmental degradation' or 'agricultural management' or 'health'
- •Synonyms:
- Water: rivers, lakes, sea, coastal, 'domestic water', etc
- Pollution: 'oil spills', chemical, biological, toxicity, etc
- illness, disease, etc
- Alternative spellings: none
- •Plurals: river(s), lake(s), disease(s)
- •Capitals: name of a specific lake, disease, region

## Step 3: Decide ON the sources to use

What sources are appropriate for your information need?

- Individuals' and organisations' home pages
- Newspapers and magazines
- Subject directories, databases, catalogues
- Journals—titles, abstracts or full text
- Reference resources, e.g., encyclopaedias, dictionaries
- Books
- Grey literature, e.g. government publications
- Print or electronic

# Step 4: Find Out How the search tool functions

Electronic search tools all function slightly differently and may use:

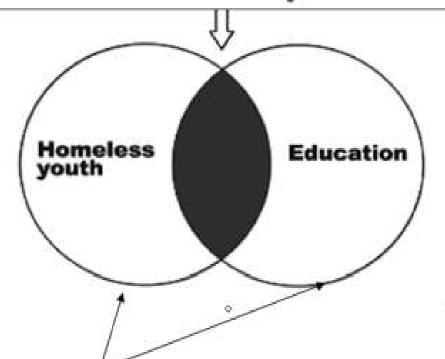
- Boolean operators
- Phrase searching
- Case sensitivity
- Truncation or wildcard functions

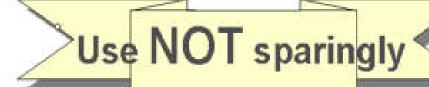
# Boolean searching

- Boolean searching is the conventional basis for searching most computerized systems, including bibliographic databases.
- Primary operators AND, OR, NOT
- In some cases NOT can be indicated with the minus sign ("-"). Also "+" = AND and "|" = OR in some databases. The expressions "Must contain" or "all of these words" implies the operator AND, whereas "Any of the words" implies the operator OR.

# AND finds only data with both concepts

Improves precision





Improves recall

If both concepts are not present, the article(s) will not be retrieved

OR finds data with either concept

cars

automobiles

#### OTHER SEARCH TOOL FUNCTIONS

- Phrase searching: allows you to search for an exact phrase
- Truncation/wildcards: allows you to search for alternative spellings
- Case sensitivity: recognition of upper or lower cases in search terms
- Fields: searches in fields such as the title, URL or links

## **Step 5: Run the search**

- Take the terms/keywords you have decided on
- Find the sources from which you are going to search
- Read the 'Help' page to find out how that particular source uses Boolean commands, wildcards, etc
- Run the search

# Step 6: Review and revise your search

- Hopefully you have found what you are looking for, or at least places to start from, but
- Be prepared to review and revise your search scope and strategy
- Try new sources of information
- Start the process again if you need to

# WHY EFFECTIVE SEARCHING IS IMPORTANT?

- There are huge resources online
- www is not indexed/catalogued and so we need to formulate searches carefully
- We need to have effective use of
  - Computers
  - Bandwidth
  - Time
  - Money

#### **Evaluation of information from the internet**

#### The need for evaluation

- The Internet is a large electronic network which has no centralized monitor and is not regulated for reliability, authority, or accuracy
- When research is conducted on the Internet, it's important to evaluate the credibility of the sites visited.
- The author's credentials, educational background, expertise on the topic, the author's association with a credible institution etc. are very relevant.

### **Evaluation continued**

In evaluating information from the internet the following criteria should be used:

- Reliability
- Authority
- Credibility
- Accuracy/completeness
- Relevancy
- Currency

# Reading List

- A. Entsua-Mensah, C (Ed.)(2015). *Information literacy skills: A course book* (Revised Edition). Cape Coast: Library Publication Committee.
- B. Apte, S.D. (2015). *Advanced digital signal processing*. New Delhi: Wiley India Private Limited.
- C. Eisenberg, M.B., Lowe, C.A. & Spitzer, K.L. (2008). Information literacy: An essential skills for the information age. Ohio: Linworth Books