BASIC INTERNET SEARCH TECHNIQUES



Learning Objectives

At the end of this presentation the student will be able to:
State definitions for the terms Internet, World Wide Web and search engine
Analyze a research topic
Develop appropriate search strategies and conduct a search
Refine search results



Before starting your search it's a good idea to have a basic understanding of the tools used to retrieve information:
 Internet
 World Wide Web
 Search engine

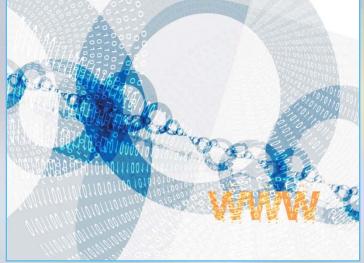


The terms Internet and World Wide Web (Web) are often used interchangeably, but they are not the same thing



The Internet provides the electronic communication structure

The Web uses the structure to find and display information from a variety of sources



You can search for information on the Web using any number of different search engines

What are search engines?

Search engines are large databases of web

page files



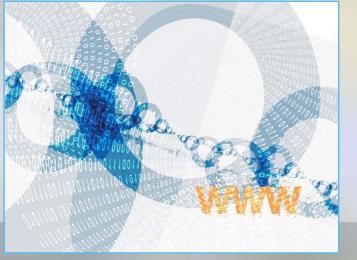
Search engines use programs called "spiders" or "robots" to "crawl" through Web pages, index the information and add it to the search engine

Most of the information is free, though there may be links to sites that are not

free



When you use a search engine (such as Google, Yahoo, Ask, AltaVista) you are asking it to scan its index of sites and match your keyword(s) and phrase(s) with those in the texts of documents within its database

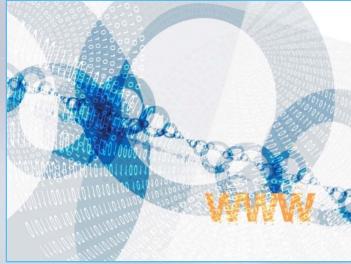


Due to the sheer number of words indexed by search engines you may get many responses to simple search requests

- You may get lengthy documents in which your keyword appears only once
- Many may not be relevant to your topic



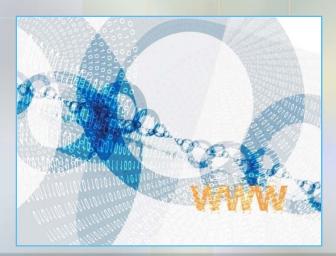
 Web pages found by search engines do not go through a review process
 Anyone can publish their ideas
 You must evaluate the site and information carefully



 No two search engines are exactly alike in terms of
 Size
 Speed and content
 Ranking schemes
 Search options



Remember – a search engine
 Cannot think for you
 Cannot understand what you mean by your concepts or terms
 Can only match the word(s) you choose



No single search engine can access the entire Web

The information you retrieve will depend on:

The search engine(s) and the search term(s) you use



Check your search engine's home page or initial screen to find out its default or basic settings
 Look for "help", "tips", "FAQs"
 Know the default settings as this may explain why your search results are not what you expected



Searching for information can be frustrating and the results overwhelming

Analyzing your topic, and then using search techniques effectively, will help you obtain the information you need for school or personal use



First take time to think about exactly what you are looking for – be specific

It may be useful to write out your topic in the form of a sentence or question to help clarify exactly what type of information you need



Example: I want to research dyslexia
What about this topic are you interested in?

Do you want to know the extent of the problem (statistics), signs/symptoms, effect on learning, how to help someone with dyslexia, what age group?



 Example: I want to research driving in the elderly population
 What about this topic are you interested in?

Do you want to know physical changes that affect the elderly, how many elderly still drive (statistics), any laws that limit

driving based on age, pros and cons of driving after a certain age?



Once you identify your topic break into key concepts or points

Write down all the keywords and phrases that best describe your topic



Think of synonyms or related terms for each concept or point

Consider spelling variations as well as the singular and plural of words



Example: If writing about dyslexia in the adult population consider terms such as:

Dyslexia: reading disorder, developmental reading disorder, learning disability

Adult: adults, mature individual(s)



- Example: If you are researching driving and the elderly consider these related terms:
 Driving: drive, automobile driving, car driving, auto driving
 - Elderly: old, aged, geriatric(s), elder, older adult, aging



The word(s) you use will determine the information you find

Using different words in your search may give you additional information



Strategies to Conduct Your Search

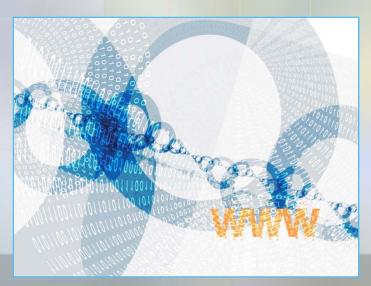
To do a basic search on most search engines type in a keyword you have identified – example: dyslexia

This will produce the greatest number of results, though often not what you want



Strategies to Conduct Your Search

 A multiple keyword search retrieves more specific or focused results
 Example: elderly driving laws
 When using a multiple keyword search, put the most important keywords first



Strategies to Conduct Your Search

Use " " marks around phrases to make sure they are searched exactly as is otherwise most search engines will look for each word separately

- Example: "nursing care plans" vs. nursing care plans
- Example: "world health organization" vs. world health organization



You can refine and improve your search by using different techniques to broaden or narrow your search results



 Search tips to refine your results
 Use a plus sign + in front of a word to require its inclusion (no space between the sign and the word)

A word or phrase preceded by a + must be present in the search results

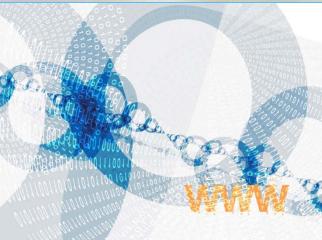
Example: +newborn



 Search tips to refine your results
 Use a minus sign – in front of a word to require its exclusion (no space between the sign and the word)

A word or phrase preceded by a – will exclude that word in the search results

Example: –infant



 Search tips to refine your results
 Use lower case to find both upper and lower case versions of a word
 Use of upper case results in only exact upper case matches



 Search tips to refine your results
 Boolean searching
 A way of connecting keywords using the "operators" AND, OR, NOT
 Here's how they work



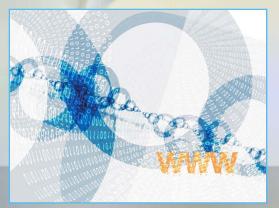


Boolean searching

Use of the "operator" AND <u>narrows</u> your search because the results must contain <u>all</u> of the search terms connected by the word AND, not just one of the words
Example: heart AND lung

Example: newborn AND infant

Example: dyslexia AND adults



Boolean searching

Use of the "operator" OR <u>broadens</u> your search because the results must contain <u>at least one</u> of the search terms connected by the word OR

Example: heart OR lung

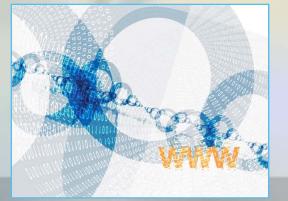
Example: adolescent OR teenager



Boolean searching Use of the "operator" NOT <u>excludes</u> terms so that your results do not contain any of the terms that follow it

Use of NOT excludes unwanted concepts or words

Example: lung disease NOT smoking



 Here are some additional search techniques you may find useful
 Truncation
 Wild cards

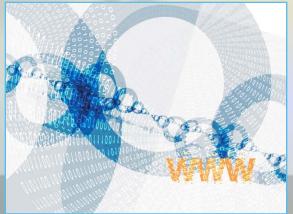


Use truncation and wildcards to search for variations in spelling and the form of a word

Examples of spelling variations can be seen in the difference between American and British spelling

Examples: pediatric vs. paediatric,

orthopedic vs. orthopaedic



Truncation

Typing the stem, or root of a word, plus a *, ? or \$ symbol at the end of the word will retrieve all forms of the word

Example: allerg\$ will yield allergy, allergic, allergen

Example: gastro* will yield gastroenteritis, gastrointestinal, gastroenterologist



Wildcards

Wildcard symbols such as a ? may be inserted in place of a letter(s) in a keyword
 Useful when you are not sure of a spelling or when there are different forms of the root word

Example: wom?n will yield both woman and women



The symbols used may vary depending on the database or search engine you are using



Your Search Approach

Remember

- There is no right or wrong approach. It depends on
 - The topic you choose
 - The time you have but NEVER wait until the last minute!

How exhaustive your search needs to be



Need Help? help

Stuck? Have a question? Can't find what you're looking for? Ask a member of the Library Staff – we are here to help you!

