# Communicating science toolkit: Searching for trustworthy information

## A. Journal articles:

"The scientific journal is the repository of the accumulated knowledge of a field…." (American Psychological Association Publication Manual, 2011: 9)

## So what types of articles can we find?

• **Reports of empirical studies** – original research

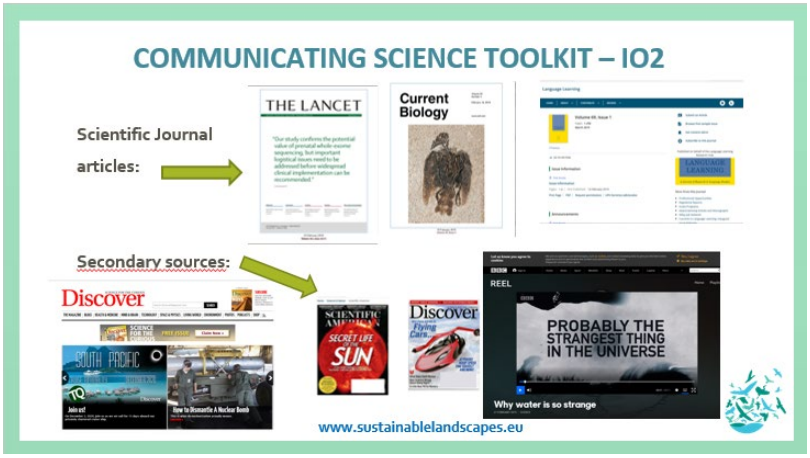
• **Reviews of literature** – research syntheses or meta-analysis of other research studies where authors will analyse the results of several or many similar studies in the field. Literature reviews critically evaluate articles and texts already published.

• **Theoretical articles** – the key word is 'theory', authors will use different articles to analyse and perhaps propose advances in the theory of a particular field of study.

• **Methodological articles** – Present new methods, or variations of existing methods, or examines how data is dealt with in the scientific community. They may also compare data analysis methods or how studies are carried out.

• **Case studies** – can present a problem or issue and indicate or give clues as to how to solve the problem.

Articles from research journals normally report on a specific piece of research that the writer has carried out. **Primary sources** are original documents and the author is conveying information about something s/he has experienced/done. Primary sources also include research reports on studies directly carried out by the author. **Secondary sources**, on the other hand, interpret, evaluate and comment on primary sources, through radio or TV document.



## B. Searching for information on the internet

Most webs include a three-letter suffix

- .com = the most used, indicating a commercial site
- .edu--educational institution site
- .gov. = a government web page in USA or UK
- .org = a non-governmental organisation website

And the final letters indicate the country where the website is found, for example, .es = Spain.

.ie; .fr; .cn; .bd; .eus; .ca; .et; .fi; .hn; .hk; .iq; . jo; .lt; .ni; .sn; .uk; .ye

Ireland, France, China, Bangladesh, Euskadi, Canada, Ethiopia, Finland, Honduras, Hong Kong, Iraq, Jordan, Lithuania, Nicaragua, Senegal, United Kingdom, Yemen

## C. Searching the internet

1. **Ask a clear research question**. Break the question down in to **keywords**. Use these words for your search

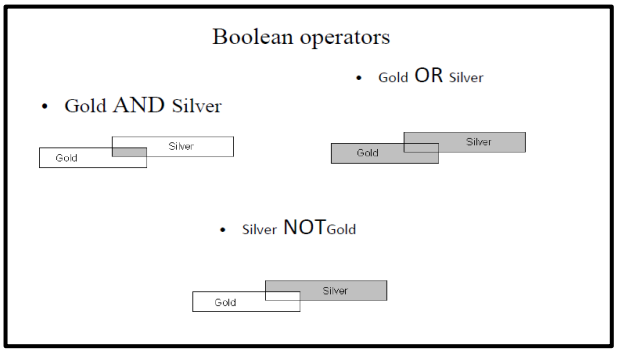
**Get help in finding good keywords**: http://www.thesaurus.com/

2. Apply what is called **truncation**, usually an asterisk * to find plurals/alternative word endings:

- Typing **marshland*** the search engine will look for both **marshland** and the plural form **marshlands** or **climat*** (climate, climatic, climatology..)

3. **Quotation marks** are often used to specify a phrase, e.g. “college students” AND “exam anxiety” since when these words are written individually, they may not give the information that is wanted. Or for exact terms: “soil drainage” will find this only and not ‘drainage of soil’.

4. By using **Boolean logic** you can establish different relationships between the words in your search. Use **AND** to narrow your search (this means that the hits returned must contain both words); **OR** is used to broaden your search (hits will contain **either** search term); and **NOT** to exclude from your search (hits will not include this particular term). Google automatically puts an AND between the search terms.




5. Spelling and capitalisation don't matter too much, there is an automatic correction suggested by Google, or any other search engine, e.g. if you type in '**wetlnads'** (with a typo) it will suggest the corrected word '**wetlands**'.

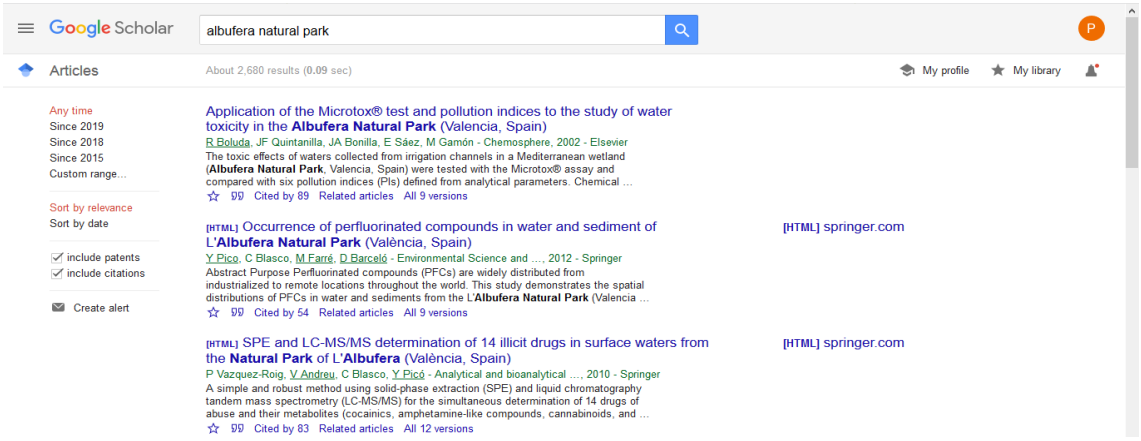
6. You can also **apply filters**, limiting the hits by date, by relevance, etc.

7. If nothing of interest comes back, try **changing your search terms** and key words.

8. TRY THIS QUIZ AT HOME ABOUT STARTING TO SEARCH FOR INFORMATION, GO TO THE LINK http://content.aub.aau.dk/swim/ AND CLICK ON SWIM QUIZ

| **TOPIC: Globalisation and feminist thought in Development** | | | |
|---|---|---|---|
| ROW 1 | Concept 1: globalisation | Concept 2: feminist thought | Concept 3: development |
| ROW 2 | globalization<br>multinational<br>global market | feminism<br>gender theory | economic<br>poverty<br>policy |
| ROW 3 | 1. globali?ation OR multinational OR global market | 2. feminist thought OR feminism OR gender theory | 3. development AND (economic OR policy OR policies OR poverty |
| TIPS:<br>Identify key words and consider synonyms, alternative spellings, broader and narrower search terms:<br>✓ Apply truncation (usually *) for alternative word endings and plurals<br>✓ Use wildcards, usually ? to replace single characters (in the table above it is used to replace both 's' and 'z' since these spellings are both acceptable<br>✓ Define relationships with Boolean logic<br>o 'and' for both terms<br>o 'or' for either term<br>o 'not' to exclude a term | | | |

## D. Searching in GOOGLE SCHOLAR




Search term: for example “Albufera natural park”

1. Title of the article (Link to the abstract or article on the web)
2. Cited by (number of other authors who have used and cited this article)
3. Related articles, similar topic
4. WHERE you can get the article

Lastly (but not least ☺), it is important to evaluate the materials you get back from your search. See the file ‘Searching for information. Evaluating resources’ and ‘The TRAAP test’ with some ideas about this.