

Associate Professor **Nazir Ibrahim** (MRCP)

Syrian Private University (SPU)

Chairman of the NASH committee ASSLD

Member of SWGSVH

Member of national committee for viral hepatitis

Member of the Syrian scientific board of Gastroenterology

Co-Author of the Cochrane collaboration Hepato-biliary group

Introduction

About This Tutorial

In the Problem-Based Learning format (PBL) the self-study time is important, but
which learning materials do you study
and how do you find them?
Sometimes your teachers give references, but is that enough and is it
always what you were looking for?

Introduction

About This Tutorial

It is important to be able to find your own learning materials. Study materials can be books or journal articles, but also pictures, video clips, animations, web lectures, etc.

Introduction

About This Tutorial

How do you find relevant and trustworthy learning materials quickly?
tips and tricks.

In Search of Study Materials

Introduction

To find information for your topic you need to answer the following questions:

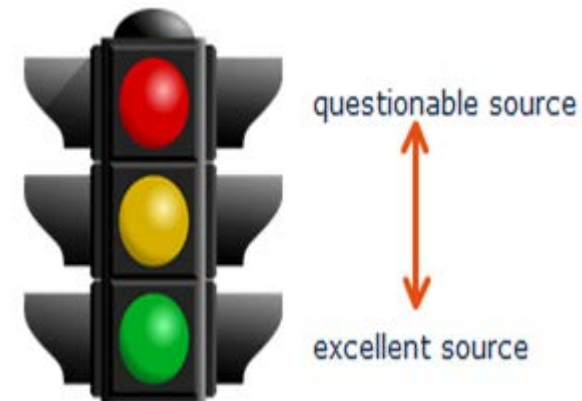
- What is my topic?
- What sources do I choose? (for example: open educational resources)
- How do I search?
- When can I stop searching?
- How do I evaluate the sources?



In Search of Study Materials

What?

- (e-)books, (e-)journals
- pictures, video's
- lectures



Where?

- via the UM Online Library
- on the World Wide Web
 - visiting known & trusted websites
 - surfing the Internet



In Search of Study Materials: Some General Search Tips

Structured search

Key (main) concepts

If you want to find all relevant study material on your topic and you want to do it efficiently, you'd better perform your search in a *structured* way.

Start by identifying the *main concepts* in your topic.

Ask yourself which themes/words must be present for the information source to match your topic.

In Search of Study Materials: Some General Search Tips

Structured search

Search terms

If you know the *key concept*
next step is
to **write down words** for each concept.

Some General Search Tips

Structured search

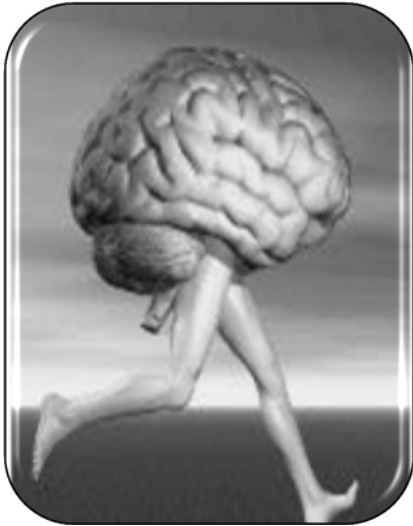
These words are your search terms.

Bear in mind that each author uses different words to describe a topic. So, you need to be as complete as possible.

- **broader term:** less specific or more general term
- **narrower term:** more specific term
- **synonym**
- **related term:** another term that is closely related to the term, but does not have the same meaning
- **singular/plural**

In Search of Study Materials: Some General Search Tips

Example



Topic:

motion of the lower extremities and their control by the central and peripheral nervous systems

Key concepts: lower extremities; motion; nervous systems

Search terms:

synonyms: movement, mechanism, motor system

narrower terms: hip, knee, ankle, central nervous system, peripheral nervous system

related terms: reflexes, coordination, proprioception, planning/initiation of the movement, motor pathway system, motor problems

In Search of Study Materials: Some General Search Tips

Boolean Search

Now that you have your *key concepts* and *search terms*, you can start your search. To get the results you are looking for, you can combine various search terms using Boolean operators.

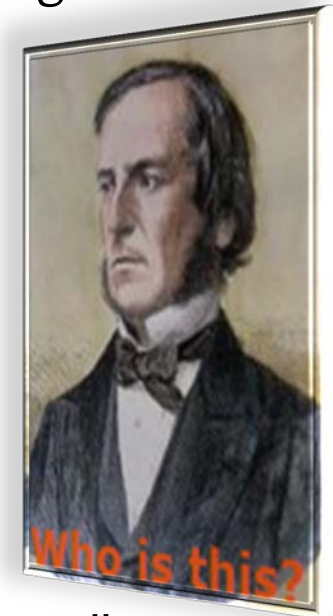
Effectively, this means that you group all synonyms and related terms from each concept with OR, and you combine different concepts using AND.

What are **Boolean operators**?

Boolean operators help narrow or broaden a search by using them between search terms.

The three basic Boolean operators:
AND, OR, and NOT

Tip: Search engines, such as Google and Yahoo!, automatically add AND to your search terms

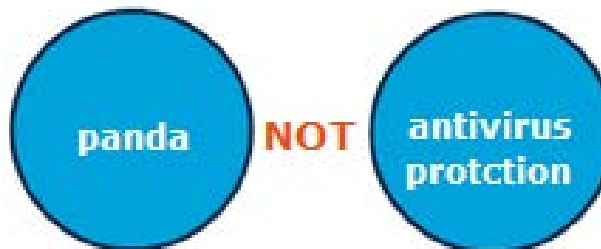
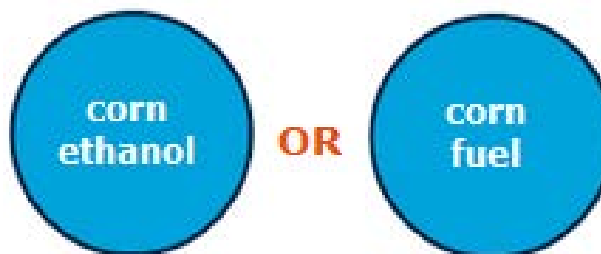
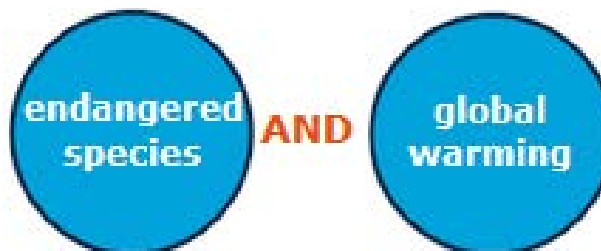


Roll over me

In Search of Study Materials: Some General Search Tips

Boolean Logic

Click on each pair of circles to learn more.

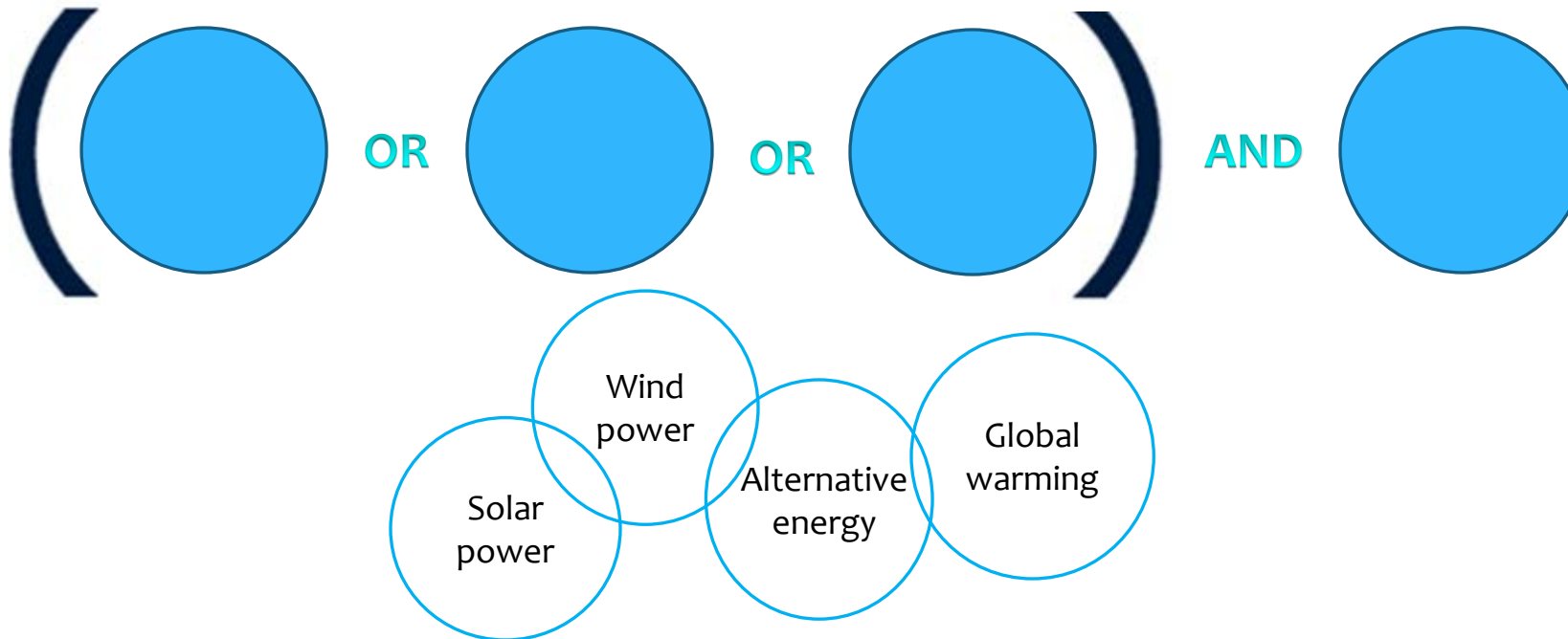


In Search of Study Materials: Some General Search Tips

Combining Operators Using Parentheses (..)

You can use multiple operators within the same search to get even more effective and powerful results. Simply group your synonyms with OR, then combine them with another key concept using AND.

In the animation below you can see how this works.



In Search of Study Materials: Some General Search Tips

Quiz

Which search would return fewer results?

- ☐ recycle AND environment
- ☐ recycle OR environment

Which Boolean operator do you use to group all synonyms and related terms from each concept (e.g. agriculture, farming, crops)?

- ☐ AND
- ☐ OR
- ☐ NOT

The default and hidden 'Boolean' operator in a standard Google search is:

- ☐ AND
- ☐ OR
- ☐ NOT

In Search of Study Materials: Some General Search Tips

Truncation (wildcards)

Another technique that can improve your search results is called truncation.

Truncating a word means that you are able to search different forms of the same word at the same time.

Truncation requires the use of symbols, called wildcards.

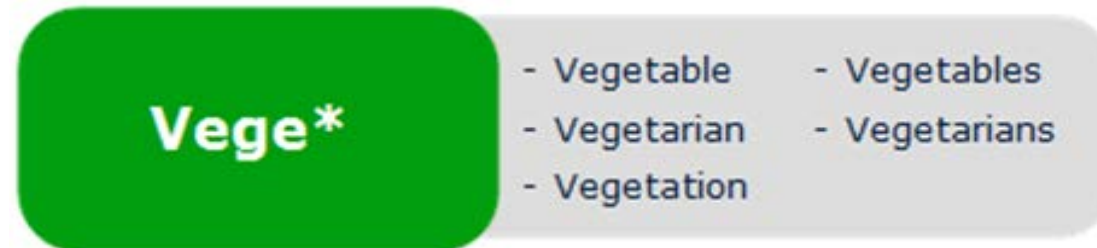
The most common symbols are:



In Search of Study Materials: Some General Search Tips

Using Truncation

Shorten the word to its root and add the truncation symbol.



This will retrieve similar, singular, and plural forms of the root word "Vege". Truncation can save time and expand your search to include related words.

In Search of Study Materials: Some General Search Tips

Using Internal Truncation

Replace one letter within a word using the wildcard symbol.

Wom?n

- Woman
- Women

Gr?y

- Gray
- Grey

Using internal truncation can increase your search results to include different forms and spellings of the same word.

In Search of Study Materials: Some General Search Tips

Avoid Truncation Overload

Trying to truncate a word too early can retrieve many unrelated and unwanted results.

For example, when trying to search for topics related to “politics” think carefully about where to truncate your search term.


Poli*

In Search of Study Materials: Some General Search Tips

Phrase Search

A search on **product development** returns a **lower** number of results than a search on "**product development**" (**using double quotes**).

- ☐ true
- ☐ false

In Search of Study Materials: Some General Search Tips

Quiz

Every database uses the same wildcard for their truncation symbol.

- ☐ true
- ☐ false

How would using
your search results?

- ☐ It would retrieve results that may have alternate endings
- ☐ It would retrieve related words
- ☐ It would re
- ☐ None of the

If you search the truncated word **educat***, what form(s) of the word would you retrieve in your search?

- ☐ Education
- ☐ Educator
- ☐ Educating
- ☐ All of the above

UM Online Library

Introduction

Search the UM library collection for medical videos and/or animations

being on-campus
or using
remote accessⁱ



ONLINE LIBRARYⁱ



- LibSearchⁱ
- Databasesⁱ

UM Online Library

Access to the Databases list

The screenshot shows the 'Databases' section of the Maastricht University Online Library. At the top, there is a navigation bar with links: 'Library', 'Collections', 'Using the library', and 'Skills &'. Below this, the 'Databases' title is followed by two selection methods: 'Select databases by name' and 'Select databases by subject'. The 'Select databases by name' section includes a 'Starts with:' label and a list of letters: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z. The 'Select databases by subject' section features two dropdown menus: 'Discipline' and 'and/or Type', both of which are circled in blue. A speech bubble points to these dropdowns with the text 'Limit your database selection by subject'. To the right of the dropdowns is a red 'GO' button. Below the dropdowns is a 'Search for database:' label followed by a text input field and another red 'GO' button. At the bottom, there is a note 'Navigate through database pages (showing 50 per page):' and a set of four small circular navigation buttons.

Maastricht University
Online Library

Library Collections Using the library Skills &

Databases

Select databases by name

Starts with: **A B C D E F G H I J K L M N O P Q R S T U V W X Y Z**

Select databases by subject

Discipline and/or Type **GO**

Search for database: **GO**

Navigate through database pages (showing 50 per page):

● ● ● ●

UM Online Library

Example of a database where you can find medical videos and/or animations



Access Medicine is the ultimate medical education online resource. Besides many clinical/science books, the Access Medicine portal contains also diagnostic tests, **videos, images & audio**, drug database, practice guidelines, case files and links to the evidence.

UM Online Library

Example of a database where you can find medical videos and/or animations



Real anatomical images, mostly based on MRI-scans of living persons, adapted for tridimensional pictures.

These pictures can be rotated and anatomical structures can be displayed in various layers.

Functions, biomechanics and surgical procedures are clearly illustrated.

UM Online Library

Example of a database where you can find medical videos and/or animations



The 'Skills In Medicine' program has been developed to facilitate students in learning how to perform a number of basic medical skills that can take place during a physical examination. In general these are skills that a student should learn during the Bachelor/Master phase of their education. A large number of diagnostic examination procedures are explained and demonstrated in the video-clips.

Known & trusted websites

Introduction

Some examples of known & trusted sites recommended by your faculty:

- www.medischonderwijs.nl (read more on page 24 of this module)
- [Teaching Resource Centre Pharmacology](#) (read more on page 25 of this module)

Some other suggestions:

- [iTunes University](#) (iTune U courses)
- www.nobelprize.org/educational/medicine (the official web site of the Nobel Prize)
- <http://www.radiologyassistant.nl> (non-profit organization)
- <http://www.anatomyzone.com/> (free commercial(!) online anatomy resource)
- www.roitt.com (resources site for the 12th Edition of Roitt's Essential Immunology)
- [MedlinePlus](#) (a service of the U.S. National Library of Medicine)
- [NEJMvideo](#) (You Tube channel of the New England Journal of Medicine)

Known & trusted websites: www.medischonderwijs.nl

The screenshot shows the homepage of [medischonderwijs.nl](http://www.medischonderwijs.nl) (medicaleducation.nl). The header includes the site name and a navigation bar with links for 'Help', 'Contact', and 'About'. A green box highlights the 'Help' link, with an arrow pointing to it. Below the header, there is a login section with fields for 'E-mail address' and 'Password', a 'Remember' checkbox, and a 'Login' button. A green box highlights the 'Free Access !!!' text, with an arrow pointing to it. To the right, there is a search section titled 'Easy access to more than 970 medical e-learning applications'. It includes a search bar, a 'GO' button, and a dropdown menu for 'Institution'. Below the search section, there is a footer area with a paragraph of text and a green box highlighting the sentence 'For further assistance look in the end-user manual.', with an arrow pointing to it.

medischonderwijs.nl
medicaleducation.nl

Login

E-mail address:

Password: ☐ Remember

[Forgot your password](#)
[Create a new account](#)

Free Access !!!

Easy access to more than 970 medical e-learning applications

Created by P.W. Bloemendaal | [RSS](#) | [Help](#) | [Contact](#) | [About](#)

Search by keyword through information on lessons of the participating institutions.

Institution:

Department:

[Aanbevelen](#) [Delen](#) 81 personen raden dit aan. Registreer om te zien wat je vrienden aanbevelen

Help on MedicalEducation.nl

All Internet users can create an account on medischonderwijs.nl. With this account you can gain access to all Medical computer based training lessons that are open to Internet users. Accounts can only be used after activation. The email address you provide as login name has to be valid to do so. After login you can search for lessons with free text or click open a list of lessons, ordered by medical department or body part.

 'Approved' logo indicates that this E-learning module has been reviewed by experts on medical content. This review is carried out according to a systematic method following (Dutch). The result of the review (in Dutch) is shown to the users of MedicalEducation.nl by clicking on the logo beside the E-learning module.

All your teaching activities are logged in your personal portfolio.

For further assistance look in the end-user manual.

Please, read the [end-user manual](#) first to find out:

- how to create an (free) account
- which institutes are participating
- how to search for medical e-learning applications

Known & trusted websites:

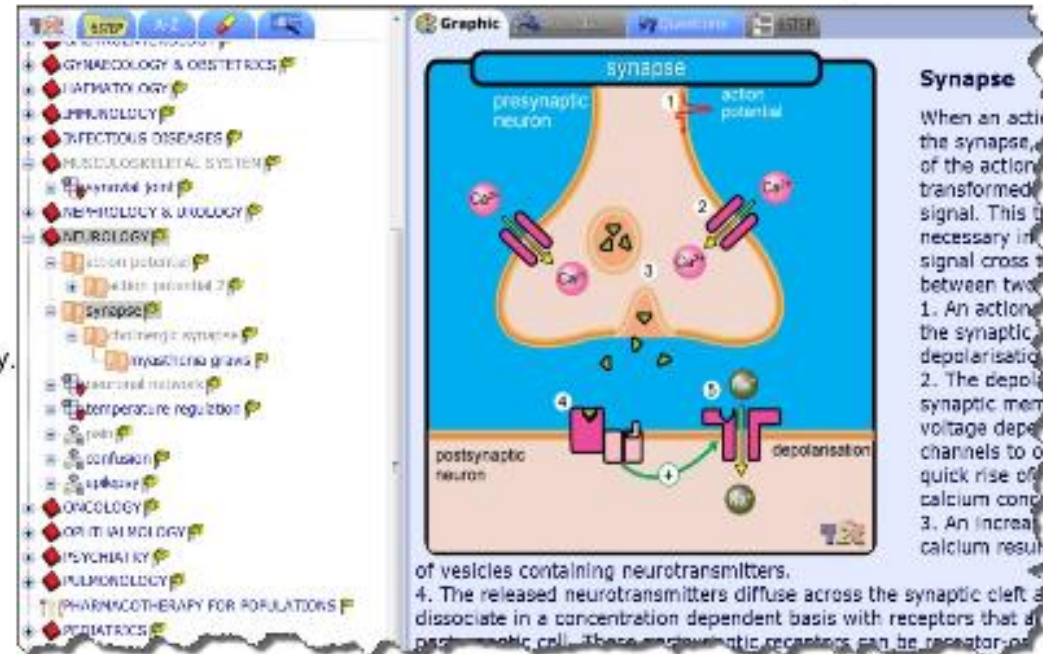
Teaching Resource Centre Pharmacology

There are four ways of accessing the TRC

1. You can use your personalized version of the Teaching Resource Centre Pharmacology by logging in on MedicalEducation.nl. You might need to create a personal account in MedicalEducation.nl. It is free, and gives you access to a great variety of online medical teaching materials.
2. You can use [Teaching Resource Centre Pharmacology](http://TeachingResourceCentrePharmacology) without personalization (and miss out on all its benefits!)
3. You can download the TRC iPad app from the App Store or iTunes.



4. You can download the TRC Android app from Google Play.



Surfing the web

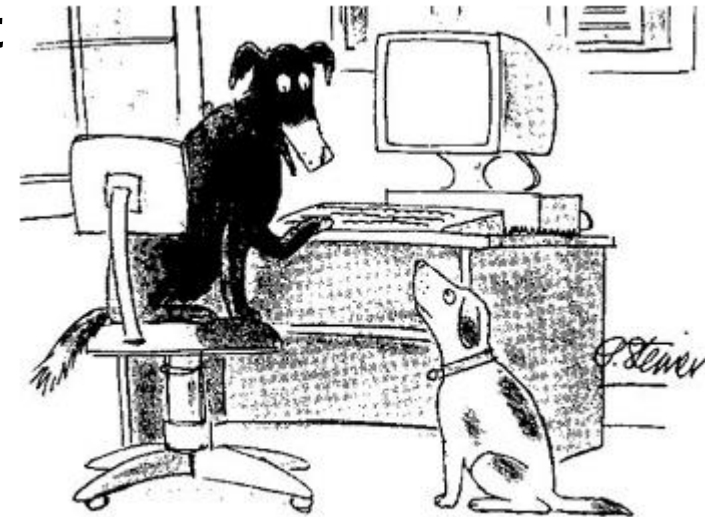
using a search engine like Google or a distribution platform like YouTube

Introduction

Anyone can put anything on the Internet

therefore you have to know how to:

- search effectively for specific material
- evaluate the sources



"On the Internet, nobody knows you're a dog."

Surfing the web

using a search engine like Google or a distribution platform like YouTube

"Behind your simple page of results is a complex system, carefully crafted and tested, to support more than one-hundred billion searches each month."

(<http://www.google.com/insidesearch/howsearchworks/thestory/>)

Learn more about the basics '**How Search Works**' in this short video (3:14)



More information on Google's Inside Search page '[Crawling & Indexing](#)'

Surfing the web

using a search engine like Google or a distribution platform like YouTube

Learn more about the Visible (Surface) Web & the Invisible (Deep) Web in this short instruction video (2:10).



'To Google or not to Google'

Surfing the web using a search engine like Google

Use **Advanced Video Search**, to find your (medical) video's from trusted sites.
Go to Google videos > options > Advanced search



Surfing the web using a search engine like Google

Compare these two search results: Basic Search vs. Advanced Video Search

You can try it yourself

Go to the Google website and perform two searches

Basic Search: video anatomy knee

Advanced Video Search:

- Find videos:
 - *all these words:* anatomy knee
 - *site or domain:* edu

and compare the two result lists

See also the chapter: Evaluate your sources

Surfing the web using a distribution platform like YouTube

YouTube Channels

Most of the content on YouTube has been uploaded by individuals, but many organizations offer some of their material via a YouTube channel.

Surfing the web using a distribution platform like YouTube

YouTube Channels

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Surfing the web using a distribution platform like YouTube

Some tips & tricks to search like a pro using YouTube:

- enter extra search terms to find trustworthy sources
 - 'university' (medical videos **university** channels)
 - 'journal' (medical videos **journal** channels)

Always evaluate your sources!



Evaluate your sources

Introduction

How to evaluate if the found information is valuable for you, in terms of quality and trustworthiness?

The **CRAAP** test, developed by librarians at California State University (CSU) at Chico, is a list of questions that help you evaluate the information you find.

CRAAP is the acronym for:

- Currency
- Relevance
- Authority
- Accuracy
- Purpose

Evaluate your sources

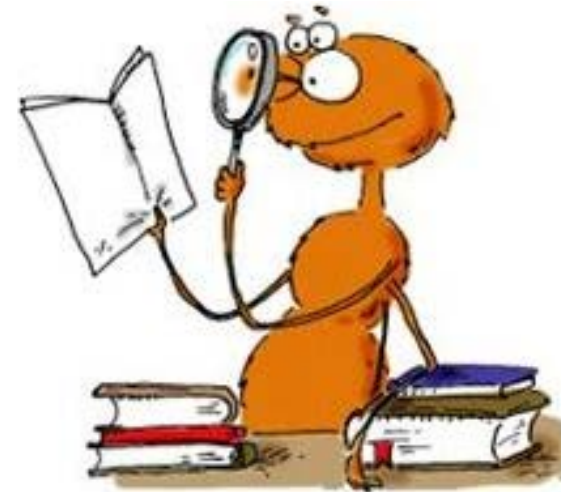
Introduction

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CRAAP is the acronym for:

Currency
Relevance
Authority
Accuracy
Purpose



Evaluate your sources using the **CRAAP** test

Move your mouse over the orange buttons to find those questions

Currency

Relevance

Authority

Accuracy

Purpose

Evaluate your sources

[Learn more](#) Watch this video, ..



This video (2:17) contains some great tips for evaluating sources.

Manage your search

Document your search

It's important to document your search:

- list of the keywords / search terms
- the keywords / search term combinations
- the used source (database / website [URL])
- date the search was run
- motivation of your choices
- save the Search History of databases



Why?

- to have the ability to reconstruct your search (to retrieve your results)
- to explain the search results / used sources
- to prevent double searches / keyword omissions
- to have the ability to reference (cite) your results (to avoid plagiarism)

Manage your search

Copyrights

Be aware of issues relating to the rights of others

- ethics and data protection
- intellectual property issues



The Maastricht University Library compiled the [Copyright Information Point](#) to inform and advice UM students, teachers and researchers about copyright issues.

Many sources use [Creative Commons licensing](#).

A “Some rights reserved” licensing system. It allows creators to make their works available for use in less restrictive ways than under copyright law (© "All Rights Reserved"), and allows to put conditions on those uses.



example of CC license

Share your files online

Introduction

Video: 'Be Aware of What You Share ...'

Uploading your files to (freely available) cloud services is very convenient. You can always access your files from every device and easily share them with friends or fellow students. And you have more storage than we provide you with.

So keep on sharing, as long as you know what you share. Keep in mind that services such as Dropbox, Box and Google Drive store most of your files on servers in the States. They do not provide guarantees when it comes to security and privacy of your sensitive data.



Share your files online

Storage war

OneDrive, OpenDrive, iDrive, Google Drive, Amazon Cloud Drive, Box, Dropbox, 4Shared, Evernote. Sometimes you can't see the forest from the trees anymore. Free and paid cloud providers try to persuade you to use their services.

So which one should you use? Well, we don't know either. We just want you to use cloud services consciously and share files strategically. Do you know that you grant almost all providers the right to your content? Or that your content often falls under the jurisdiction of US law?



Share your files online

Good practices

- Be aware of what you share. Only share content online you're comfortable with
- Always save the same data to different services
- Never store copies of confidential documents in the cloud
- Always use a strong password for your accounts. Use a pass-phrase instead of a password.
- Trial each service and see which one fits best
- Check out the provider's terms and conditions for information about content ownership.

Share your files online

Maastricht University's I:drive

We offer you a personal drive with a storage capacity of **250 MB**.
Via the use of Student Desktop Anywhere or VPN this drive can be accessed worldwide.

Another option is using EleUM's content folder that gives you **200 MB** of storage. Share your files with users inside and outside of campus.

Institutional storage services are backed up as well as checked for viruses on a daily basis.

Let's now have a look at three of the main and leading cloud storage services: Dropbox, Google Drive and OneDrive.

Share your files online

Online file sharing services

To help you make an informed choice, check out these 2014 videos from the You Tube-channel Technology for Teachers and Students.

OneDrive (11:06)



Dropbox (11:46)

Google Drive (16:12)

Share your files online

Learn more

In this 30-minute webinar Australian IT Support Company R&G Technologies reviews and compares Dropbox to Google Drive and OneDrive. Furthermore it tries to answer which file sharing tool is the best fit for you.



Of course you can use any other cloud and file sharing service you want, as long as you are aware and conscious of what you are doing.

Test yourself: What have you learned?

Take up the challenge and do the quiz



The End

You have now finished this e-learning tutorial.

We hope you learned:

- how to search effectively for the information you need
- how to evaluate the sources as well as the information
- that not every source is relevant or valuable for you

Colophon

Developer:

This information literacy tutorial is developed by the [Maastricht University Library](#).

This tutorial is largely based on:

[Begin Research Online Workshop](#) by University of California Irvine Libraries

&

The 'Information literacy' Modules at [Wageningen University & Research Library](#)

&

The Information Literacy E-learning courses at [Erasmus University Library](#)

THANK YOU FOR YOUR TIME .

www.spu.edu.sy