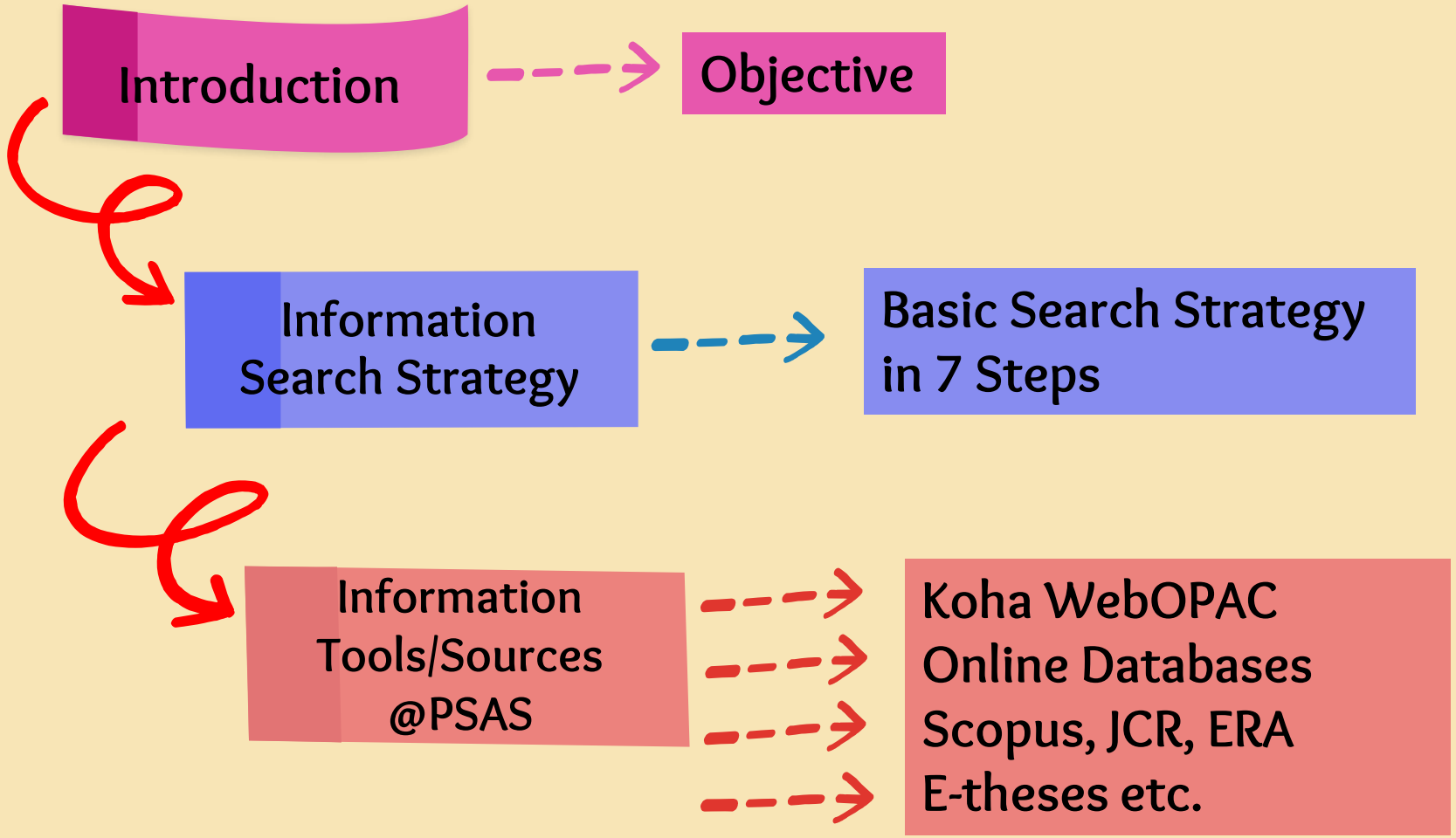
INFORMATION SEARCH STRATEGY

PREPARED BY: REFERENCE DIVISION, PERPUSTAKAAN SULTAN ABDUL SAMAD

INFORMATION SEARCH STRATEGY OUTLINE



OBJECTIVE

Students will be able to:

1. Find relevant information

- Analyse your research topic.
- Identify terms to use in a database search for relevant articles.
- Develop an effective search to find useful references.

2. Save time

- You plan your searching and avoid hours of trial and error surfing.
- You have identified relevant resources instead of relying only on internet search engines.

3. Make good use of what the library has to offer

- You are aware of the range of resources that support your subject.
- You have knowledge of useful services e.g. Document Delivery Services.
- You know how to contact your librarian.

4. Develop your skills

- Enhance IT skills though search techniques.
- Critically evaluate information from different sources.

1. It is a new topic and academically interesting.

2. There is enough information on the subject.

3. It is focused enough that you are not overwhelmed with too much information.

4. The topic is interesting to you.

BASIC SEARCH STRATEGY IN 7 STEPS

STEP 1

Analyse your topic

STEP 2

Create a search strategy

STEP 3

Choose relevant search tool(s)

STEP 4

Search needed information

STEP 5

Evaluate result

STEP 6

Get the materials

STEP 7

Evaluate materials and your sources

Before you begin looking for information, you need to analyse the topic

Understand the scope of the topic and what its **related subject area**

Brainstorm the topic:
Find definition and **identify main concepts / keywords** to describe your topic

Keywords: **Keywords are significant words which can be used as search terms in online catalogues or databases**

EXAMPLES OF THE TOPIC

Physicians' attitudes toward substance abuse

The keywords you use have an impact on the results of your research

1. ANALYSE YOUR TOPIC | 2. CREATE A SEARCH STRATEGY | 3. CHOOSE RELEVANT SEARCH TOOL(S) | 4. SEARCH NEEDED INFORMATION | 5. EVALUATE RESULT | 6. GET THE MATERIALS | 7. EVALUATE MATERIALS & YOUR SOURCES

TOPIC

CONCEPTS/ KEYWORDS

Physician

Attitudes

Substance Abuse

IDENTIFYING KEYWORDS, SYNONYMS AND RELATED TERMS

Determine whether there are **synonyms, related terms, or other variations** of the keywords that should be included.

THESAURUS

Thesaurus is a book of synonyms, often including related words/concepts (to get proper term)

DICTIONARY

A reference book containing an alphabetical list of words, with information given for each word, usually including meaning, pronunciation, and etymology.

ENCYCLOPEDIA

Provide information that is general, but brief. They provide an excellent place to start research.

If the keywords you choose do not give you the results you need, try these suggestions:

IDENTIFYING KEYWORDS, SYNONYMS AND RELATED TERMS

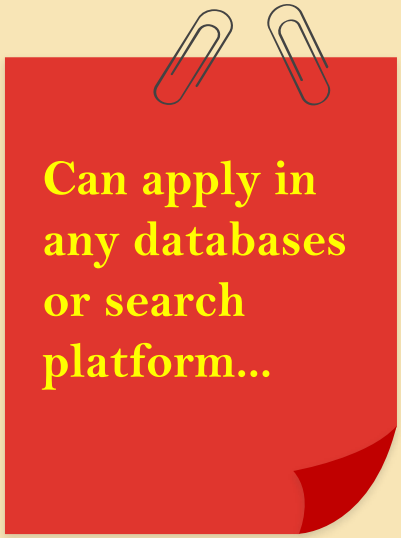
Topic

Physicians' attitudes toward substance abuse

Concepts/Keywords	Synonyms/Related Terms
Physician	**Physician** • Medical practitioner, doctor, general practitioner
Attitudes	**Attitudes** • Perspective, point of view, viewpoint, stance
Substance Abuse	**Substance abuse** • Addiction, alcohol abuse, drug abuse, drug use, alcohol addiction

Determine which search features/technique may apply, including:

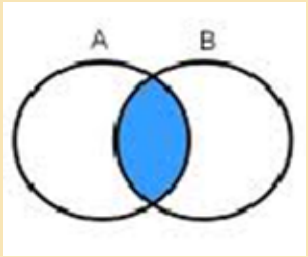
1. Boolean Operator
2. Phrase Searching
3. Truncation
4. Wildcard



1. BOOLEAN OPERATORS - logical search operators that allow you to **narrow** or **broaden search**.

AND

A
Drug Use

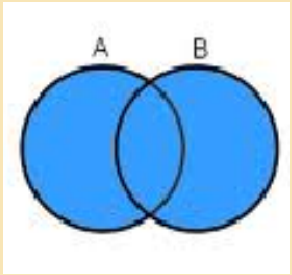


B
Alcohol Addiction

Narrows a search: Each result contains all search terms

OR

A
Alcohol Abuse



B
Drug Abuse

Broadens a search: Each result contains at least one search term

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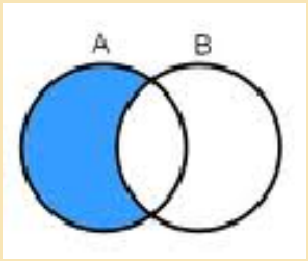
NOT

A
Addiction



B
Alcohol

Narrows a search: Results do not contain the specified terms

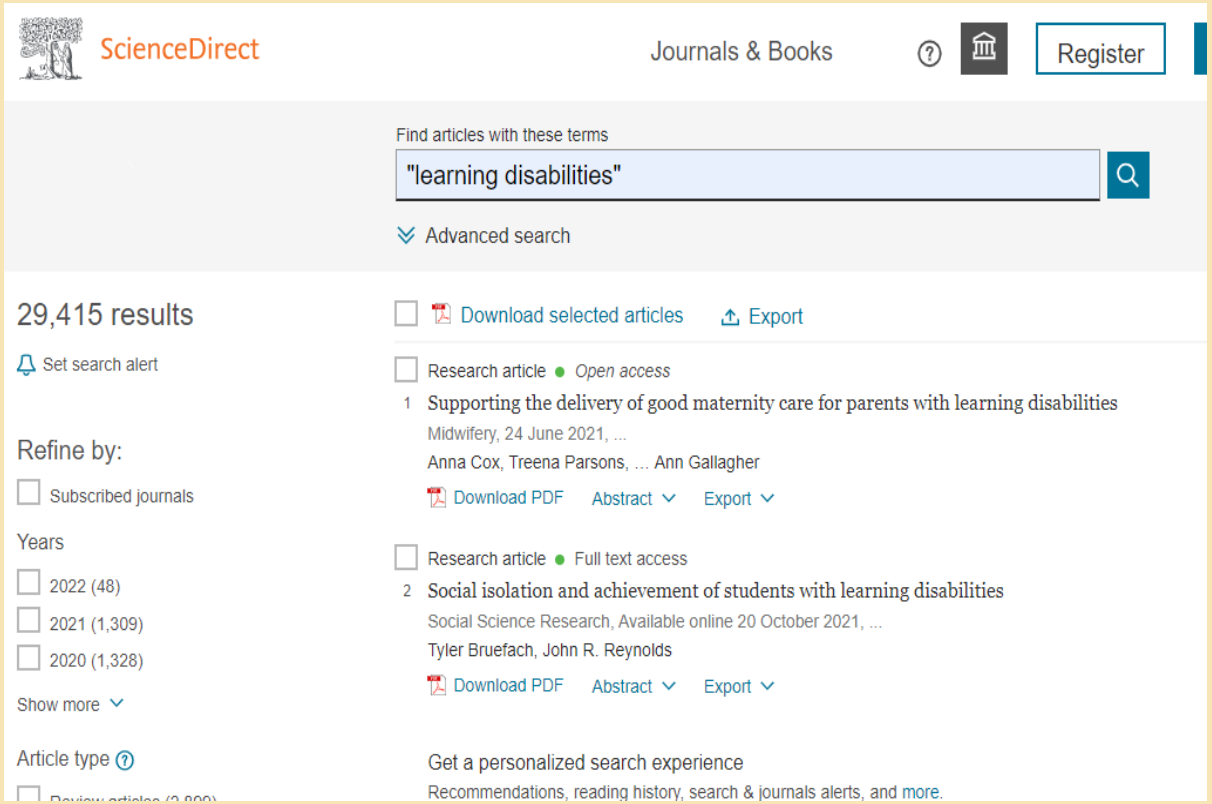
2. PHRASE SEARCHING: Exact matches on words within a phrase search (with **double quotes**) get a higher relevancy boost over the same words in non-phrase searches (without double quotes).

Example:

"development disabilities"

"learning disabilities"

For example: "**learning disabilities**" will search for results in which the words **learning** and **disabilities** appear next to each other.



3. TRUNCATION - place a **symbol** at the **end** of the word

Truncation is a searching technique used in databases in which a word ending is replaced by a symbol. Frequently used truncation symbols include the **asterisk (*),** a **question mark (?)** or a **dollar sign ($).**

If you want to search for several words that have the same stem, using *truncation* can save time.

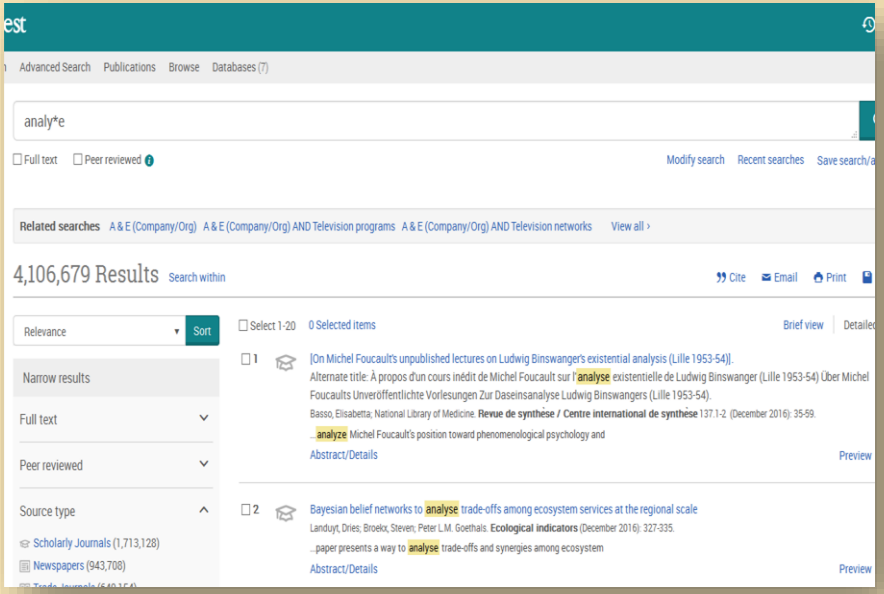
Examples:

- Nutri* retrieves words starting with **NUTRI** such as **NUTRIA**, **NUTRIENT**, **NUTRIENTS**, **NUTRITION**,
- gene$ will search for results containing;
  - **gene, genes, genetic.**
- Bio* will search for results containing;
  - **biology, bionic, biosynthesis, biophysical**

Different databases use different truncation symbols so it is important to check the database 'Help' information or 'Search Tips' for details about which symbol to use.

Truncation can sometimes find irrelevant records.

4. WILDCARDS: place a **symbol within** a word



Different databases use different wildcards symbols so it is important to check the database 'Help' information or 'Search Tips' for details about which symbol to use.

Wildcards are symbols used in database search to **represent a letter or letters in a word.**

Find variation of spelling (singular/plural)

Find variation of language spelling (American/British)

Frequently used wildcard symbols include the **question mark (?)**, the **pound/hatch symbol (#)** or the **asterisk (*).**

Examples:

- Analy*e will search for results containing the words;
  - ✓ **analyze, analyse (s,z)**
- Wom?n will search for results containing;
  - ✓ **women, woman (e, a)**

KEYWORDS AND SEARCHING INFORMATION STRATEGY EXAMPLES

1. SCOPUS

1. TITLE-ABS-KEY (*climate* AND *change* OR *climate* AND *risk*) 66,828 document results
2. TITLE-ABS-KEY ("Climat* chang*" OR "climat* risk*") 367,117 document results

Updates:2/2022

2. SYSTEMATIC REVIEW ARTICLE

(("Climat* chang*" OR "climat* risk*" OR "climat* variabilit*" OR "climat* extrem*" OR "climat* variability*" OR "climat* uncertaint*" OR "global warming*" OR "temperature ris*" OR "sea level ris*" OR "el-nino" OR "la-nina") AND ("Adapt* abilit*" OR "adapt* strateg*" OR "adapt* capacit*" OR "adapt* capabilit*" OR "adapt* strength*" OR "adapt* potential*" OR "adapt* practic*" OR "adopt* abilit*" OR "adopt* capacit*" OR "adopt* capabilit*" OR "Adopt* potential*" OR "adopt* strateg*" OR "adopt* practic*") AND (fisherm*n OR fisher* OR lobsterm*n OR trawler*))

Sources: Shaffril, H.A.M., Abu Samah, A., & Samsuddin, S.F., Ali, Z. (2017). Mirror mirror on the wall, what climate change adaptation strategies practiced by the Asian's fishermen of all? Journal of Cleaner Production, 232, 104-117.

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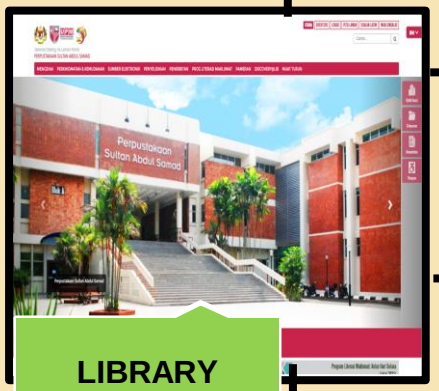
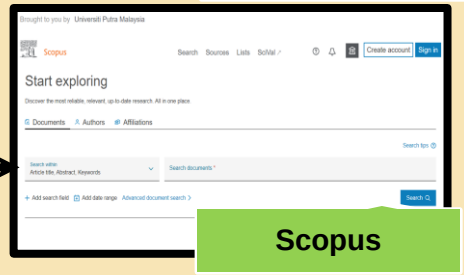
Searching Tools & Information Sources @ PSAS

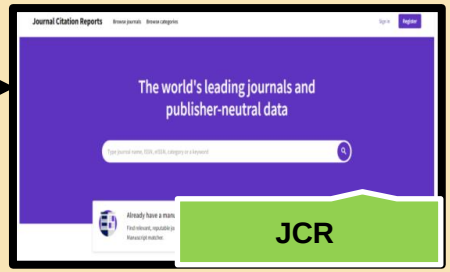


LIBRARY WEBSITES

WebOPAC

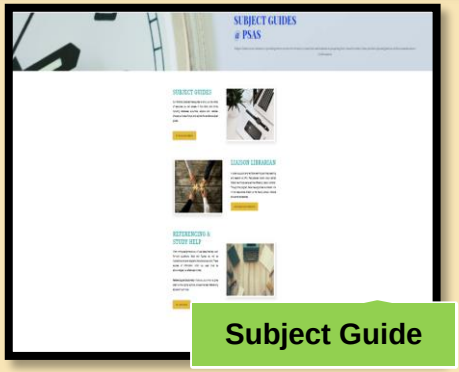


Scopus



JCR

ERA

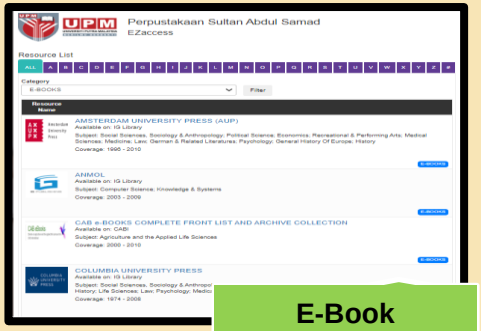


Subject Guide

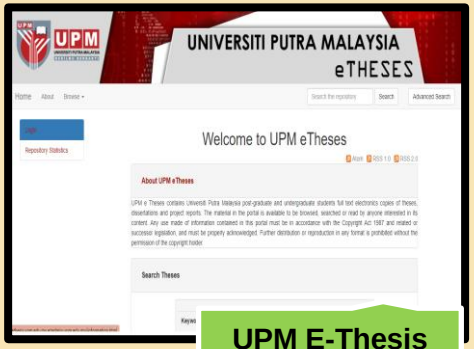
Online Database

UPM IR

PSAS Research Info Hub



E-Book



UPM E-Thesis

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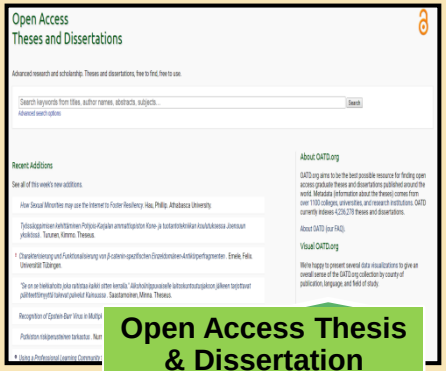
More searching tools & open access @ Malaysia / World

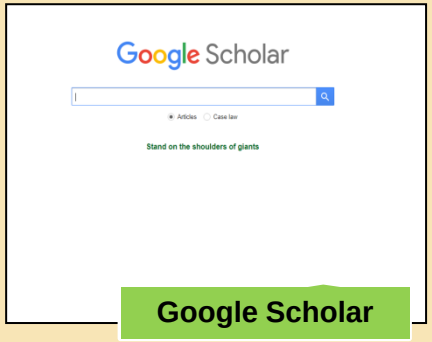
MALCat

MyTO



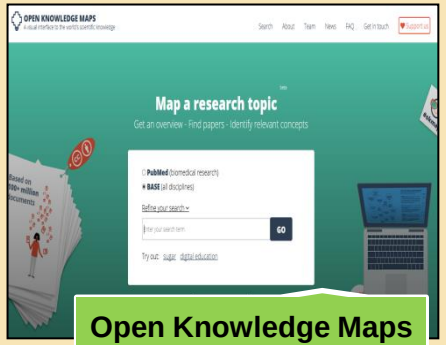
Open Access Thesis & Dissertation

Directory of Open Access Journal

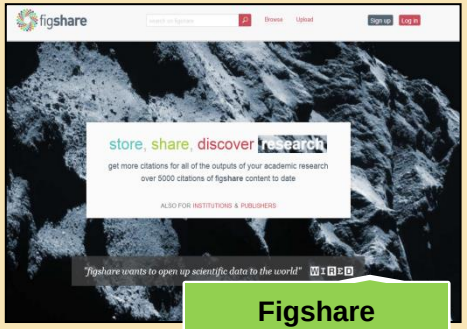


Google Scholar

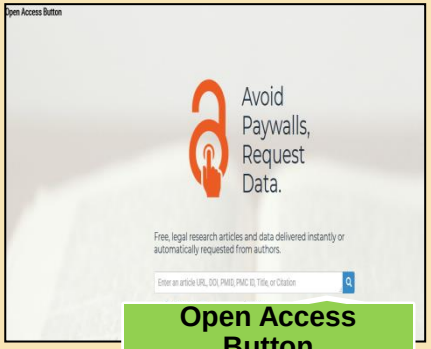
MyJurnal



Open Knowledge Maps



Figshare



Open Access Button

	What do you need?	Searching Tools	What will you get?
1.	Printed Materials	Library WebOPAC	Book, Journal, Thesis etc. in printed format

KOHA WEBOPAC

MALCAT

Are you looking for a book or journal article that we don't have? We can order them for you through **Document Delivery Service.**

The Document Delivery Service enables UPM students, faculty members, and staff to borrow materials not available at UPM libraries from other collaborating libraries, both local and abroad. Requests are restricted to materials required for study, teaching, or research purposes only.

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	What do you need?	Searching Tools	What will you get?
2.	Online Materials	Online Databases, E-Book, Online Journal	Download full-text articles/books

PSAS Subscribed Databases & E-books

EZaccess Portal

ELSEVIER Scopus | ProQuest Start here. | vetstream | emerald insight | EBSCO HOST | THOMSON REUTERS InCites Journal Citation Reports | THOMSON REUTERS EIKON + DATASTREAM | CABI | turnitin | IEEE

Open Access & other e-resources

DOAJ | MyJurnal | Google scholar

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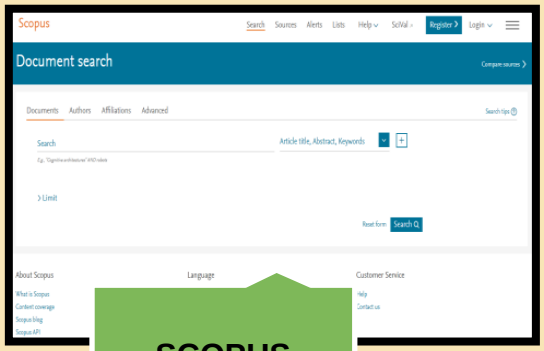
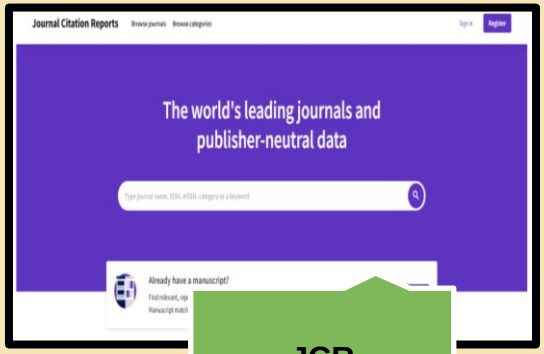
	What do you need?	Searching Tools	What will you get?
3.	Citation Indexed Journal (CIJ)	Incites JCR, Scopus, ERA	Impact factor, Journal Ranking, Quartile



SCOPUS



JCR

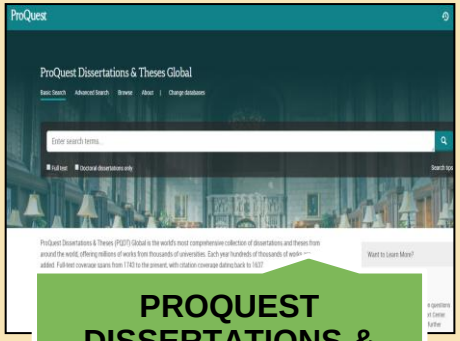
ERA

Please join Citation Indexed Journal class for further information.

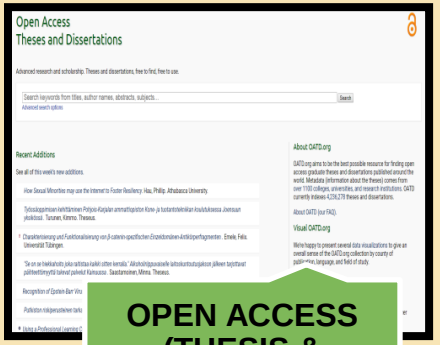
What do you need?	Searching Tools	What will you get?
4. Online Thesis	UPM eTheses, Proquest Dissertations & Theses Global	Download full-text thesis

UPM E-THESES

MyTO



PROQUEST DISSERTATIONS & THESIS GLOBAL



OPEN ACCESS (THESIS & DISSERTATION)

✓ A thesis submitted in fulfilment of the requirement for the degree of Doctor of Philosophy of
✓ A dissertation submitted in partial fulfilment of the requirements for the degree of Master of
✓ A dissertation submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy

For example: *Technology acceptance of education in ICT* A thesis submitted in fulfilment of the requirement for the degree of Doctor of Philosophy of

Start searching the information

The databases that you access via the library are all quality controlled

It is important to evaluate Internet resources critically;

- Anyone can post anything.
- The quality and format of information you find on the Internet may not be appropriate for use in the academic context.

REMEMBER: Citing your information sources will avoid plagiarism and respect the Intellectual Property and Copyright issues

Evaluate the results of your search → ask yourself:

Is the amount right for the length of the paper and the time you have?

Do the results have the quality you want?

Did you find what you expected to find?

Ask yourself

Are they useful for your paper?

Exclude articles that did not meet the criteria determined.

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1.	Printed Materials	If you have found printed books/thesis via our WebOPAC	Borrow at the circulation counter
		If you have not found full text journal and articles, printed books/thesis via search tools	Borrow/Get from other institutions: USE DOCUMENT DELIVERY SERVICE
2.	Online Materials	Search journal and articles using EZAcceSS	Download fulltext softcopy to your laptop/computer
3.	Citation Indexed Journal (CIJ)	Incites JCR, Scopus, ERA	Impact factor, Journal Ranking, Quartile
4.	Online Theses	Search online theses using UPM eTheses, Proquest Dissertations & Theses Global	Download fulltext softcopy to your laptop/computer

Who wrote it?

Authority/Credibility

author's credentials, known or respect authority, indexed in Scopus and Incites JCR

Does the author provide references for quotations and data?

Is it accurate? Is it supported by evidence?

Accuracy

up to date, factual, comprehensive

Support

listed sources, contact information

Reasonableness

fair, balanced, objective, no conflict of interest, concerned with the truth

Based on your topic, is the information current enough?

TERIMA KASIH/*THANK YOU*

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WITH KNOWLEDGE WE SERVE