

# Search plan – VT18

- To pass the project at the course 729G19, the Search plan and the Summary of information retrieval assignments must be completed.
- The *Search plan* is made together in your project groups and is the beginning of your information retrieval for your project. Immediately after submitting your *Search plan*, you should start with the assignment *Summary of information retrieval*. Here you continue to further develop your skills in information retrieval.
- Use the subject guide: IDA & Information Systems at the library's website to reach the appropriate search tools and resources.
- The assignment should have the heading *Search plan* and contain information about which project group you belong to and contact information for all group members.
- Your text should be about 1 A4, font: Times New Roman size 12 with single line spacing (1.0).
- Your search plan must be submitted as a PDF file to Mikael.Rosell@liu.se during week 6 (5-11/2).
- Feedback on the assignment will be given by e-mail.
- If your search plan does not meet the specified requirements, you will be asked to do necessary corrections and re-submit.
- For questions, please contact Mikael.Rosell@liu.se.

# **Instructions**

- The purpose of this assignment is to get you to start searching for information to your project.
- You need to spend a lot of time on searching for information so that you can complete the assignment correctly.
- Choose and test keywords in different search tools and reflect which are most suitable for finding relevant sources for your project, as well as reflecting on how to critically evaluate and select relevant sources of information.
- Below are more detailed instructions on how to complete this assignment.

The assignment is divided into 4 sections, *Project question: Information Needs & Keywords*, *Search Tools*, *Source Criticism*, and *Next Step*. Use these sections as headings to the text in your own document.

Sökplan 1 (5)

# 1. Project question: Information Needs & Keywords!

The first step in your search for information to your project is to determine which words are to be used and combined into search queries, to find information. These keywords provide the basis for the gradual development of your information retrieval and, in the long run, the entire project.

- a) Describe your project question/questions. What information do you need to answer it? What are your information needs?
- b) Add the keywords that you will start using in your information retrieval, both in Swedish (if you use any) and in English.

Note:

• There are many different words (synonyms), such as *Working Memory* and *Short-Term Memory*, which can be used to describe your subject. For your information retrieval to progress, you need to identify these. An effective way to find new keywords is in headings, abstracts, and subject lists of relevant sources that you find.

## 2. Search Tools

At the beginning of your information retrieval process you first need basic information about the topic you are writing about. For this need to use search tools like Google, UniSearch, Digital Archives & Encyclopedias.

Once you have read up on your topic, you will need to find more advanced information on the subject using search tools for scientific publications.

It is mandatory to use at least three search tools to find information for your project, one of which needs to be UniSearch. Evaluate, compare and motivate which of these three mandatory search tools seems useful and/or less useful to find basic and advanced relevant information for your project work. Use all seven of the following criteria when evaluating the search tools.

Please note that Google and Google scholar can't be chosen as one of the mandatory search tools, you are of course still free to also use them both in your information retrieval for your project.

### Criteria to evaluate search tools

- 1) What topics, publication types (*journal articles, conference articles, books, etc.*) and data quantity (*e.g. 15 000 scientific journals*) does the search tool covers?
- 2) The search interface's user-friendliness in the search tool, intuitive search interface, or does it take a long time to understand how to use the search tool?
- 3) How are the possibilities to create search queries with search features (*e.g.*, *subject*, *language*, *publication type or publication year*, *etc.*) and search operators (*e.g. Boolean operators*, *truncation and phrase search*, *etc.*) in the search tool to find relevant sources?
- 4) How are the sources in the search tools presented and can you sort the result list if necessary on relevance, publication year, number of citations, etc.?

Sökplan 2 (5)

- 5) Has a content quality control (*e.g.*, *peer-review*) been conducted of the sources presented by the search tools?
- 6) Can you access the source in its full text via the search tools?
- 7) Other reflections linked to the advantages and disadvantages of the search tools?

#### Useful search tools

# Google

https://www.google.se Google search operators

Use Google to search for information and new keywords about your subject.

#### Note:

- In a search engine like Google, one can find anything, think about critical evaluate the sources.
- Google finds something about everything but not all about something, in addition to Google always use other search tools.
- The large amount of results and limited possibilities for refining the results can make it difficult to find relevant sources.

## **Encyclopedias**

http://www.bibl.liu.se/soka/databaser/?l=en&sc=true

Use encyclopedias to search for basic information and new keywords about your subject.

- Nationalencyklopedin
- Encyclopædia Britannica Online
- AccessScience

#### Note:

- Encyclopedias can either be subject specific or general.
- Encyclopedias are usually secondary sources (they refer to other sources).

## **Library catalogs**

http://www.bibl.liu.se/?l=en&sc=true

LIBRIS: http://libris.kb.se

Use Libris and filters in UniSearch to find books or chapters in books in LiU's collections on your subject.

## Note:

- Each title has topics that describe its content, which are good to use as keywords.
- Linköping University Library Books are also available in Libris.
- It is possible to loan printed but not electronic literature from Libris.

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## Digital archive

DiVA Portal: http://www.diva-portal.org/ Uppsök: http://uppsok.libris.kb.se/sru/uppsok

Use DiVA and Uppsök, search tools for research publications and student theses produced at various institutions of higher education and research institutions in Sweden.

#### *Note:*

- In DiVA it is possible to limit the search only to LiU or to student theses.
- The universities connected to the two search tools differs slightly.

### E-books

http://guide.bibl.liu.se/c.php?g=145146&p=950381

Use LiU's e-book collections to find books or chapters in books about your subject.

- Books 24x7
- Ebook Central

#### Note:

- E-book collections allow full-text searches and electronic access to the titles.
- All titles in the e-book collections are in English so search with English terms.

## **Search tools for scientific publications**

Google Scholar: http://scholar.google.se

UniSearch: http://www.bibl.liu.se

Databaser: http://guide.bibl.liu.se/IDA-Informatik

Use Google Scholar, UniSearch, and databases to find scientific publications about your subject.

Useful databases:

- SpringerLink
- ScienceDirect
- Scopus
- PsycINFO

#### Note:

- Find out what subjects and types of publication (*journal articles, conference articles, books, etc.*) that are covered by the search tools.
- If you do not find relevant sources, try another search tool. Also, an article that is not found in one search tool can usually be found via another.
- In most search tools, there is a PDF file associated with the publication, otherwise use the *Find Full Text* link, which often goes to the full-text source.
- Search after the titles of journals with relevant articles from the library home page (*filter: Journals*) to see if the library provides access to an it.
- Interfaces and search features (e.g., subject, language, publication type or publication year) may differ between search tools.
- Working with limiters to refine the results is essential when using these types of search tools because of large amount sources they cover. Use search features (e.g., subject, language, publication type or publication year) search engine (e.g., Boolean operators, truncation and phrase search) and combine keywords.

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- Use the Ulrichsweb database: global serial directory to check if a journal is scientific and if it applies peer review.
- If available, use the *Cited by* function for a current source to find new relevant sources.
- For access to scientific publications outside the Campus network (Eduroam) read more here.

## 3. Source Criticism

With support of chapter 11: evaluation of resources in How to find information<sup>1</sup> explain and motivate how you will use the following source-critical criteria in evaluating the relevance and credibility of your sources. What do you think is easiest and most difficult to evaluate?

- Who is the author/s, background and merit?
- Who is the publisher and what does it have for reputation?
- Has the source undergone any kind of content quality control (e.g. peer review)?
- Are the conclusions made reasonable based on reported results?
- Are data results, theory and research method presented in the publication?
- Are the sources clearly listed in the reference list?
- Number of references (cited by) to the source?
- Is the results and conclusions contradicted or confirmed by sources of other authors?
- How current/new is the publication?

# 4. Next Step

- Explain how you plan to continue with the information retrieval for your project.
  - o What search tools will you use next?
  - What search query (combination of keywords) will you try next?
- Do you have any questions or concerns regarding your Information retrieval?

Sökplan 5 (5)

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<sup>&</sup>lt;sup>1</sup> Rumsey, Sally (2008). *How to find information*. New York: Open University Press. Kapitel 11: evaluation of resources http://site.ebrary.com/lib/linkoping/reader.action?ppg=143&docID=10229839&tm=1407942337234