1. Seminar 4, Library session

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2. Introduction

The purpose of seminar 4 is give an overview, and provide best practices when it comes to finding and reading scientific publications.

3. Key Findings

3.1. library services

Liu offers the service to borrow physical or digital books. You can use your LiU-ID as a library card and authentication to get access to online publications. There are also tools that liu supports to find what books, articles you need.

3.2. Scientific and scholarly publications

For scientific publications is published by and for researchers. These publications has a standardized structure and reading scientific publications effectively requires a structured approach to understand the content and extract key information. One should not read from start to end.

Best practice:

- Abstract: A summary of the study, read for an overview.
- Discussion: Interpret the results and significance.
- Introduction: Provides background and the research question.
- Results: Presents the findings.
- Methods: Details how the research was conducted.

3.2.1. Searching and finding scientific publications

Information search for scientific purposes involves systematically finding, accessing, and evaluating reliable sources of knowledge to support research, experimentation, and analysis. This is a recursive loop and it involves:

- Formulate question
- Find search terms, this is an important step to get the keywords and organize them so you can get relevant information. The proper use of search terms, parentheses, AND, and OR operators is essential for refining your search results.
- Chose search tools, like Unisearch, Google Scholar, DiVA, etc.
- search
- access the material

- source evaluation Relevant results are saved. References can be directly imported into latex using tools like BibTeX.

3.2.2. Evaluate your search results

This is the best practice to evaluate your search results:

- Source Publication: Verify where the article is published to ensure it comes from a reputable source to confirm its credibility.
- Peer-Review: Peer-reviewed articles are usually more reliable.
- Author/Publisher/Journal: Established authors and reputable journals indicate higher quality research.
- Presents research: Determine if the article presents original research or reviews scientific findings.
- IMRAD Structure: (Introduction, Methods, Results, and Discussion) to confirm the article follows standard scientific structure.
- Relevance: Assess if the article addresses your research question or topic, ensuring it is directly relevant to your work.

3.3. Al generated tools

There are multiple AI-tool that can help with explaining concepts, summarize texts, help with searches, citation mapping tool etc.

4. Conclusion

Seminar 4 provided an overview of library services and best practices for working with scientific publications. Liu library offers both physical and digital book borrowing, with tools to assist in finding relevant resources.

Effective reading of scientific papers involves focusing on sections like the abstract, discussion, and results, rather than reading the entire document. The process of searching and evaluating scientific literature includes formulating questions, using proper search terms, selecting search tools, and critically evaluating sources for credibility, relevance, and structure. Additionally, AI tools can assist with text summarization, concept explanation, and citation management.