## Topic 5: Literature Review

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- The Purposes of Literature Review
- Literature Searching
- Carrying out Literature Review
- Discussion

## The Purposes of Literature Review

- Know the state-of-the-art in the field
- Incorporate critical views
- Avoid repeating the work of others
- Highlight research possibilities either explicitly identified or overlooked
- Refine research objectives and questions
- Identify research methods and technologies



- Without reference to the existing literature, it is impossible to write a literature review
- Collect recognized literature related to the research title systematically
  - "Recognized" means that the literature has been verified
    - Should not be personal opinion on the webpage
    - Should be reviewed by peer expert before publication



- "Systematically" refers to in a structured and professional manner
  - Not in a random manner
  - Focus on literature related to the research topic
  - Along with the searching cycle, attention will gradually turn to a specific title



### Literature Searching (3)

- Forms of literature
  - Books
  - Journals
  - Conference proceedings
  - Dissertations
  - Company reports
  - Manuals
  - Software
  - CD-ROMs



### Literature Searching (4)

#### Books

- Starting point
- Provide good grounding and overview of chosen title
- Provide sufficient detail
- Are refereed
- May be outdated and out of line with current thinking
- Some being more technical



### Literature Searching (5)

- Journals (Open Access Journals)
  - Contain articles discussing up-to-date issues
  - Using books before journal articles
  - Only part of an article is suitable
  - Majority of references are to journal articles



#### Literature Searching (6)

- Conference proceedings
  - Published at national and international conferences
  - May contain more up-to-date ideas than journal articles
  - May present preliminary results that has yet to mature
  - The quality of articles varies widely

## Literature Searching (7)

#### Dissertations

- Including doctoral theses
- Represent students' research and provide their contribution
- Supply ideas on current thinking and useful sources of references
- Provide an idea of the scope and requirements of an academic degree
- Difficult to obtain probably being lodged only at the awarding institution



### Literature Searching (8)

- Company reports
  - Provide valuable information for case studies
  - Might be subjectively biased in favour of the company
  - May contain information cannot be used as the company does not wish it to be made public



#### Literature Searching (9)

#### Manuals

- Valuable source of information particularly within technical computing projects
- Not refereed academic articles providing insight into current thinking
- Not use them as foundations for academic discussion



### Literature Searching (10)

#### Software

- Tools, repertories and reusable components
- Websites
- CD-ROMs
  - Material is increasingly being presented on CD-ROMs
  - CD-ROMs present information from other sources in a more easily and accessible format

## Literature Searching (11)

- Tracing literature
  - Online Public Access Catalogue (OPAC)
    - Search library literatures
    - Efficiency is much higher than hand or microfilm
    - Search by author names, literature titles and keywords etc.
      - National Library of China
      - British University Library
      - Library of BJTU

## Literature Searching (12)

- Electronic database
  - Literatures are deposited into electronic databases in the form of electronic documents
  - Students search and download via campus network
  - In Chinese
    - CNKI: National Knowledge Infrastructure
    - The VIP Information Resource Integration Service Platform
  - In English
    - Web of Science (SCI, SSCI, CPCI-S, CPCI-SSH)
    - <u>EI</u>

## Literature Searching (13)

- Internet
  - Search Engine
    - Google, Bing, Baidu
  - Websites produced by publishers or software developers
    - Elsevier
    - Magneto
- Subject-specialist librarian
  - Provide searching recommendations
  - Inform the area people mostly interested in and the current state of the art

## Literature Searching (14)

#### Supervisor

- knows key literatures and well-known figures
- Tell the right place to search

#### References

- Know information for further searching
- Know active research groups
- Know the influential people
- Know important conferences and journals



#### Literature Searching (15)

- Tips for Literature Searching
  - Note interesting quotations and their reference as go along
  - Use review articles and books
  - Reference correctly from the start
  - Know when to stop



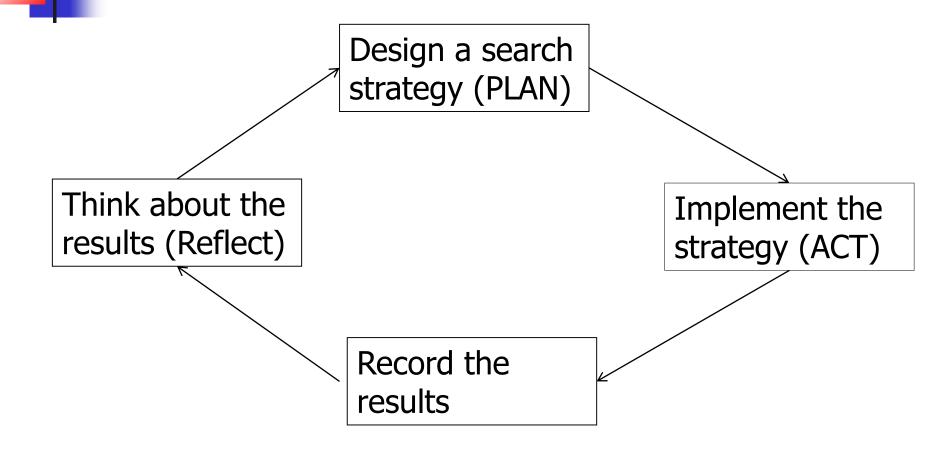
- Have a system to organize and catalogue (Explorer)
- Read recognized leaders and original theorists
- Start with a broad search before focus in



### Literature Searching (17)

- Model of reflective literature searching
  - Keep returning to the field and reviewing and rereading, catching up on new text and ideas more obviously relevant
  - Go through a cyclical model, searching, recording, processing and researching

## Literature Searching (18)





- Setting up Bibliography
  - Results of literature searching are sorted out a bibliography

#### For a book

Author(s)/editor(s)

Title

**Edition** 

Number of volumes

**Publisher** 

Place of publication

Date of publication

#### For a journal article

Author(s)

Title of the paper

Name of the journal

Volume

Issue

Page numbers

Year



- It's better to provide the following information
  - Key words for literature searching
  - Libraries with the literature
  - Views on the literature
  - Citations may be used
  - Abstracts for particularly useful literatures

# Carrying out Literature Review (1)

- A literature review is not
  - A report listing all articles read be selective
  - Dedicate a page or a paragraph to the content of each article in turn

## Carrying out Literature Review (2)

- Abstracting, noting and summarising (SQ3R)
  - Survey
    - Quickly read through an article to identify main headings
  - Question
    - What was that about
  - Read/reread
    - Look through it all/ read it carefully and reread, but only if necessary

# Carrying out Literature Review (3)

#### Record

- Take notes under main headings and take full quotations and citations of other references to follow up
- Summarise major arguments and references where the ideas and the quotations come from
- Make some sub-headings and sub-notes alongside the notes
- Start to structure the notes and process the arguments

## Carrying out Literature Review (4)

#### Review

- Have caught the most important points (the main arguments) and all need for own work?
- Have recorded the references appropriately?
- Are the quotations correct?
- What have missed?

## Carrying out Literature Review (5)

#### Organize around the headings

	Headings			
Literatures	Issues	Methods	Arguments	
1				•••
2				
3				

# Carrying out Literature Review (6)

#### Good habits

- Update literature search and review
- Return to key sources to investigate further what emerged as important issues
- Fully record the reference have found and leave it to stockpile
- Write up and use what have found to spur on more of own ideas

# Carrying out Literature Review (7)

- By practicing and reading good examples can improve writing ability
  - MEASURE and RUP based IS Business
    Modeling Method



#### Discussion

- Explain whether the case reached the purposes of literature review
- Describe the form of literatures and the way of tracking literatures you used
- What are the deficiencies of the research you chose