Access to electronic information resources and effective retrieval of literature for Research studies

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Presentation overview

- Identify types of Information sources
- Recognize electronic information sources
- Be familiar with information retrieval techniques through internet and databases
- Evaluation of Information sources
Looking at information sources

- **Primary Sources** – original sources, not interpreted, not evaluated by a second party. First formal appearance of any research or discovery

- **Secondary Sources**

- **Tertiary Sources**

  Guide to primary sources
Information sources…

Primary sources
- Journals-scholarly
- Research papers
- Theses, Dissertations
- Government legislation
- Standards
- Statistics
- Conference proceedings

Secondary and Tertiary sources
- Books (monographs)
- Bibliographies
- Encyclopaedias
- Handbooks
- Directories
- Indexes and abstracts
- Bibliographic Databases
Information sources…

Primary, Secondary and Tertiary Sources (collectively)

• Newspapers

• Internet/World wide web
Electronic Resources
Definition

An Electronic Resource is any information source that can only be accessed using a computer or a similar device.

- May be electronic version of print
- May be electronic version only
Types of E - Resources

Includes

- Journals
- Books
- Reference Sources (Dictionaries, Encyclopedias etc.)
- Bibliographic and Full text Databases, Image databases
- Theses and Dissertations
- Conference Proceedings
- Reports
- Worldwide websites e.g. WHO, Internet gateways, search engines
Electronic journal formats

- Full-text - whole journal available
  - Electronic version of print
  - Electronic only
- Partial full-text - selected articles only
- Table of contents/abstracts only

- Cited from INASP/PERI
Scholarly databases

- Bibliographic: references to published material
- Numeric: e.g. statistical tables
- Full text: complete publications
- Audio: collections of music
- Image: e.g. collections of slides
- Multimedia: audio-visual, animation etc
Why use scholarly databases?

- Provide information for a specific project or topic
- Provide an overview of research activity in a given area
- Up-to-date information on a specific subject area through regular scanning
- Allow searching over large bodies of data and academic type information
Information Gateways

- Subject Based Information Gateways (SBIGs):
  - web sites that act as a gateway to other sites and information resources.
- Rely on human creation of meta data
- Subject experts select, evaluate, describe, classify
- Smaller, subject-focused databases
- Lower recall, higher precision
- E.g. PINAKES (information gateway gateway!)
The Internet

- Huge information resource
  - 3-10 billion pages of information
- Continually growing and changing
- No national, political, scientific barriers
- Efficient search tools allow relatively easy navigation, e.g.
  - www.google.com
  - www.alltheweb.com
Advantages

• Very current contents
• Easy and efficient retrieval process
• Sharing of resources (can be accessed by many at the same time)
• Easy access to related items
• Easy to browse and save the time
Most Important Benefit

Enhances Research activities

● The benefits listed above enhance access to quality content which leads to more and better research output
Library website
www.lib.sjp.ac.lk
E-resources
Online Databases

- JSTOR
- Emerald
- Oxford Journals
- SAGE Research Methods
- Wiley Online
- Taylor & Francis
- Research4Life (HINARI, AGORA, OARE)
JSTOR

**SUBJECT**

- Area Studies (586 titles)
- Arts (1548 titles)
- Business and Economics (1925 titles)
- History (7510 titles)
- Humanities (7725 titles)
- Law (785 titles)
- Medicine and Allied Health (579 titles)
- Science and Mathematics (2731 titles)
- Social Sciences (10592 titles)
INASP programme (INTERNATIONAL NETWORK FOR THE AVAILABILITY OF SCIENTIFIC PUBLICATIONS (INASP))

- http://www.inasp.info/training-resources/

Internet gateways

  e.g. http://www.inasp.info/health/
E-resources available through INASP

- American Institute of Physics
- Mary Ann Liebert
- Symposium Journals
- University of Chicago Press
- World Bank WDI, GDF, ADI, GEM
http://www.inasp.info/en/work/journals-online/

- Journals Online
- Current JOLs
  - AJOL
  - BangalJOL
  - LAMJOL
  - MongoliaJOL
  - NepJOL
  - SLJOL
Getting Started with Your Research

Do you know which method you want to use to answer your research question?

Start out by doing a Quick Search on this method from the box in the upper left of every page. Use the Advanced Search feature for creating a more targeted query. Search results will include relevant books, book chapters, dictionary and encyclopedia entries, videos, or journal articles from over 175,000 pages of renowned SAGE content in research methods.

Not sure which method to use in your research?

Start by exploring the Methods Map. You can use the Methods Map to discover new methods or discover relationships between methods, and then link to related content.

Visit the Help page or watch a video tutorial to learn more about how to use the tools on SAGE Research Methods in your research.
HINARI Access to Research in Health Programme

HINARI Programme set up by WHO together with major publishers, enables developing countries to gain access to one of the world’s largest collections of biomedical and health literature. Up to 11,400 journals (in 30 different languages), up to 18,500 e-books, up to 70 other information resources are now available to health institutions in more than 100 countries, areas and territories benefiting many thousands of health workers and researchers, and in turn, contributing to improve world health.

Map of country breakdown 2013

123kb
Google Scholar

- Use Google Scholar to find articles from a wide variety of academic publishers, professional societies, preprint repositories and universities, as well as scholarly articles available across the web.

- http://scholar.google.com
Open Access Resources

Open access resources

We provide a list of links to open access resources. These include open access publishers, directories, toolkits, portals and more. We also maintain lists of Multi-disciplinary, Multi-disciplinary Science and subject specific resources.

Directory of Open Access Books (DOAB)

The Directory of Open Access Books (DOAB) is a discovery service for peer reviewed books published under an open access licence. DOAB provides a searchable index to the information about these books, with links to the full texts of the publications at the publisher's website or repository.

Directory of Open Access Journals (DOAJ)

The Directory of Open Access Journals (DOAJ) lists free, full text, quality controlled scientific and scholarly journals, covering all subjects and languages.

Directory of Open Access Resources (OpenDOAR)

The Directory of Open Access Resources (OpenDOAR) aims to provide a comprehensive and
Retrieval of information

- A self learning method
- you should be able to get relevant and necessary information from any information source in an efficient way.
Steps in retrieving information

i. Identifying the information need
ii. Identifying key concepts (Concept mapping)
iii. Identifying Search terms
iv. Formulating search strategy
v. Searching specific sources using search strategy
vi. Evaluating the information
vii. Evaluating the search process
Steps in retrieving information

(i) Identifying the information need

- Start by expressing your information need in words as a sentence or a question
  e.g. Research Topic, Assignment Topic

- e.g. *The impact of transformational leadership style on innovation as perceived by public employees in Jordan*
What do you know about the topic?
  • Define the scope
    – Regional coverage (continent, region, country, etc.)
      e.g. in Asia, in South East Asia, in Sri Lanka
Steps in retrieving information…

ii Identifying key concepts (Concept map)

From the title of your topic it is possible to identify various concepts and keywords. A concept map / mind map is a useful way to plot ideas.

e.g. *The impact of transformational leadership style on innovation as perceived by public employees in Jordan*
Identifying search terms

iii Identifying synonyms and keywords

- Identify synonyms for the keywords and concepts you have previously developed.
- Choose words that uniquely describe the topic.
- Think about the discipline area and database(s) you will be searching, as there may be a subject specific or database-specific thesaurus that will help you further identify keywords.
Possible terms you can use for searching?

Examples

Developing countries, Jordan
Innovation, Innovative behavior
Public sector
Transformational leadership
Identifying Search Terms

- **Issues to consider**
  - Synonyms (mobile phones, cellular phones)
  - Plural/singular forms (woman, women…)
  - Spelling variations (honour, honor…)
  - Variations of root word (feminism, feminist, feminine…)
  - Acronyms (CEO, Chief Executive Office…)
  - Lower/upper case
Searching techniques

Simple searching
- Key word searching
- Author
- Title
- Subject

Advanced searching
- Truncation
- Wild card characters
- Boolean Logic Operators
- Phrase searching
- Proximity searching
- Field search
- Set combinations
Searching Techniques...

Truncation

- Search for words beginning with the same stem using a pre-designated symbol ($ or *)
  
  e.g. manage*
  manage, manages, management, managers etc.

- It helps to retrieve related terms in one search
Wild Cards

- Wild Cards allow to search for words which have alternative spellings, specially American, English spellings.
- Wild cards symbols will vary in different search interfaces.

“?” or “*” or “#” or .

e.g. Wom#n retrieves both woman and women
Combining ‘concepts’…..with Boolean Operators

- To combine different concepts of your search question you need Boolean operators.
- Boolean operators are logical operators which enable you to broaden or restrict a search.
- The main logical operators are **OR**, **AND** and **NOT**.
Boolean logic operators

Women OR Female

It retrieves all records containing *women* or *female* or *both terms*. It retrieves more records than if you had only searched for one of the term.
“transformational leadership style” AND innovation

Retrieves records containing both transformational leadership style and innovation.

Retrieves fewer records than if you searched for records containing only transformational leadership style or records containing only innovation.
Asian countries NOT developed countries

“not” excludes records containing the search term from your results. It retrieves those records that contain Asian countries and do not developed countries.
Phrase searching

- Use of “ ” around words

- e.g. “plant poisoning”

  “market size”

- Exact phrase is used as a search term.
Searching Techniques
Web Searching - Google

- Alternative to Boolean AND, NOT is used by some Search Engines such as Google
- + ....attach the plus sign (requires) to the front of a word which must appear in all the terms found

This is similar to Boolean AND  +parasitic  +diseases

- ....attach the minus sign (excludes) to the front of a word which must not appear in any of the items

This is similar to Boolean  NOT e.g. +aids  –disease
Steps in retrieving information

Searching specific sources

- Selection of an information source that best matches your information need is important. It will not matter how carefully you have thought out your keywords etc if you are not using an appropriate source.
v. Evaluating the information

- As sources are accessed and retrieved, look at each work closely.
- Before assessing the relevance of the item to your topic, it is vital that the scope, integrity and standing of the source is ascertained.
Evaluating the information…

- assess the standing of the author - is he/she an academic? a journalist? another student? a researcher?

- look at the date of publication - is the topic representative of thinking at that time?

- ascertain the intended audience - was the material written for a general audience? other researchers? particular groups with particular views?

- notice the writing style - is it conversational? academic? provocative? sensational? descriptive?
Evaluation…

• look at the presentation - does the author use tables, graphs, diagrams, illustrations appropriately?

• refer to the bibliography and references - has the author referred to the work of others? have all ideas been acknowledged and cited? are there any citations listed which would further your work?

• look at the type of publication and its' purpose - is it a scholarly journal? a popular journal? a book? conference proceedings?
vi. Evaluation of the search strategy/process

- Irrelevant records – have to refine the search strategy
- If you retrieve a large number of records you can restrict your results
e.g. by age, year, language, publication type etc..
Evaluating a Search Strategy

- **Too many results?**
  - Review strategy
  - Use more specific terms
  - Combine search terms using AND or NOT

- **Too few results?**
  - Review strategy
  - Use broader terms
  - Combine search terms using OR

- **Satisfied?**
  - Download documents
I acknowledge with thanks the INASP, UK for some slides, ideas and facts
Thank You &
Good Luck!