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## Use of E-Resources in Teaching and Research

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### DEFINING RESEARCH

What is research?

“ Systematised effort to gain knowledge”- Redman and Mory.

Research is a process of “ manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in the construction of theory or in the practice of an art”- Slesinger and Stephenson in Encyclopedia of Social Sciences

Research comprises the following:

- Defining and redefining the problem
- Formulating hypothesis
- Collecting, organizing and evaluating data
- Making deductions and reaching conclusions

Carefully testing the conclusions to determine whether they fit the hypothesis.

### Defining Research Methodology

Methodology means the systematic study of the methods, principles, procedures and rules applied within a discipline

Objectives:

1. To gain familiarity with a certain phenomenon or gain new insights (Exploratory research)
2. To portray accurately the characteristics of a particular individual, group or situation
3. To see the frequency with which some phenomenon is associated with something else
4. Hypothesis of causal relationship between variables (Hypothesis-testing)

### Criteria Of Good Research

*Purpose* should be clearly defined.

1. Research *Process*(source of data etc) should be described in sufficient detail-except when secrecy is required-This will help verify, correct and extend knowledge, keeping the continuity of what has already been achieved
2. Design (Sampling, questionnaire, observation etc) should be thoroughly planned so as to yield objective results.

3. High ethical standards -from misusing information , to forcing respondents to answering questions to animal rights and human dignity- Dilemma
4. Limitations should be frankly revealed (e-g., flaws in design) so that the decision maker is made aware
5. Design (Sampling, questionnaire, observation etc) should be thoroughly planned so as to yield objective results.
6. Good research is *systematic*- structured with specified steps taken in specified sequence in accordance with well-defined rules
7. Good research is *logical*: logical reasoning makes research more meaningful in the context of decision making
8. Good research is *empirical*: dealing with concrete data that provides the basis for external validity to research results

### Use of E-Resources in Teaching and Research

#### Introduction

- Internet and its most used component WWW has turned into a biggest source of information with widest coverage and the fastest access. It is the most powerful tool for global communication and exchange of information.
- The amount of publicly available information on the web is increasing consistently at an unbelievable rate
- It has revolutionized the way that people access information, and has opened up new possibilities in areas such as digital libraries, information dissemination and retrieval, education, commerce, entertainment, government and health care.
- The World Wide Web can be a great place to accomplish research on many topics but finding quality web materials and using them to your advantage in your writing can be challenging.
- It is because putting documents or pages on the web is easy, cheap or free, unregulated, and unmonitored. It is a self-publishing medium, that is, anyone can publish anything. This means that not everything one finds on the Web is equally valuable or reliable. There is a famous saying in this "On the Internet, nobody knows you're a dog
- Therein lies the rationale for evaluating carefully whatever one finds on the Web. The burden is on the reader to establish the validity, authorship, timeliness, and integrity of what he finds. It is the reader's responsibility to establish the validity, authorship, timeliness, and integrity of what he finds.

#### Evaluating web sources

- Authority
- Accuracy and Coverage
- Objectivity and Purpose
- Currency

- Detailed criteria for Evaluating Internet Resources
- **Google:** Anatomy of a Search: How your search statement typed in the Google search box provides the results in fraction of seconds
- **Google:** Searching Tips : These are some nifty modifiers to type in your google search box to refine your searches and get the best results.
- **Google books :**With Google Book Search, you can quickly search the full text of a book, from the first word on the first page to the last word in the final chapter..  
[www.books.google.com](http://www.books.google.com)
- **Google Scholar :** Google Scholar helps you search and find academic papers, abstracts and other scholarly sources – all with the speed and accuracy of Google search.
- **Google Patent Search :** Each Google Patent Search result represents an individual patent. It display results based on their relevance to the specific search terms entered. It display a number of details about each patent in the list of results

### **E-Resources in public domain at a glance: E-Books**

Electronic versions of printed books that can be viewed online via any PC connected to the Internet. It includes mostly the classics. Some public domain e-book resources are:

#### **Project Gutenberg**<http://www.gutenberg.org/>

Project Gutenberg is the oldest producer of free e-books on the Internet. It is the first and largest single collection of free electronic books, or e-books. The collection consists of more than 20,000 e-books.

#### **Authorama Public Domain Books (Fiction)** <http://www.authorama.com/>

Featuring completely free books from a variety of different authors, collected here for you to read online or offline. This site is regularly updated with new freeware stories.

#### **Bartleby.com**<http://www.bartleby.com>

Provides the best works of fiction from a wide range of classic authors; general reference works like encyclopedias, dictionaries, thesauri, quotations, verses etc

#### **The Online Book Page**<http://digital.library.upenn.edu/books/>

The Online Book Page by University of Pennsylvania Library has about 25000 e-books on different subjects.

#### **MIT OpenCourseWare**<http://ocw.mit.edu/index.html>

It is a site for 500 course materials available on the Internet, for free download

### **E-Resources in public domain at a glance: E-Journals**

Journals published in electronic format, often available on the Internet.

❑ **Directory of Open Access Journals**<http://www.doaj.org/>

There are now 2514 journals in the directory. Currently 747 journals are searchable at article level. As of today 124159 articles are included in the DOAJ service.

❑ **NewJour** : <http://gort.ucsd.edu/newjour/>

An archive for the Internet list for new journals and newsletters available on the Internet

❑ **FreeFullText.com**<http://www.freefulltext.com/>

It provides direct links to over 7000 scholarly periodicals which allow some or all of their online content to be viewed by ANYONE with Internet access for free

❑ **Openj-Gate.com**<http://www.openj-gate.com/>

- ❑ It is an electronic gateway to global journal literature in open access domain. Launched in 2006, Open J-Gate is the contribution of Informatics (India) Ltd to promote OAI. Open J-Gate provides seamless access to millions of journal articles available online. Public Library of Science: <http://www.plos.org/index.php>

**PLoS** is a nonprofit organization of scientists and physicians committed to making the world's scientific and medical literature a freely available public resource. Journals' List

❑ **Bioline International**: <http://www.bioline.org.br/>

It is a not-for-profit electronic publishing service committed to providing open access to quality research journals published in developing countries. Journals' List

❑ **BioMed Central**: <http://www.biomedcentral.com/home/>

It is a Publisher of more than 160 peer-reviewed open access journals. List

❑ **Unesco Social And Human Sciences Documentation Centre**:

<http://www.unesco.org/shs/shsdc/>

Free access to specialized articles from around 700 periodicals in social and human sciences List

❑ **The Electronic Journals Library**<http://rzblx1.uni-regensburg.de/ezeit/fl.phtml>

Offers an effective use of both scientific and academic journals publishing full text articles in the internet.

❑ **HighWire Press**: <http://highwire.stanford.edu/>

A division of the Stanford University Libraries, HighWire Press hosts the largest repository of high impact, peer-reviewed content, with 1010 journals and 4,074,364 full text articles from over 130 scholarly publishers. HighWire-hosted publishers have collectively made 1,566,498 articles free. With our partner publishers we produce 71 of the 200 most-frequently-cited journals. Free Online Full-text

❑ **Indian Academy of Sciences** : <http://www.ias.ac.in/>

The Academy, founded in 1934, aims at promoting the progress and upholding the cause of science in pure and applied branches. The Academy's journals are 'open access' and full text is available as PDF files on each journal's website. See the Publications page for links to the journals and other Academy publications.

❑ **Journal of Digital Information**: <http://journals.tdl.org/jodi>

First publishing papers in 1997, the Journal of Digital Information is an electronic-only, peer-reviewed journal covering the broad topics related to digital libraries, hypertext and hypermedia systems, and the issues of digital information.

❑ **Free Medical Journals**: <http://www.freemedicaljournals.com/htm/index.htm>

Over the next few years, many important medical journals will be available online, free and in full-text. The unrestricted access to scientific knowledge will have a major impact on medical practice. The Free Medical Journals Site was created to promote the free availability of full text medical journals on the Internet.

❑ **Strategian**:<http://www.strategian.com/>

The Strategic Guide to Quality Information in Biology, Chemistry, Computer Science, Mathematics, Medicine, Physics, and Psychology

### **E-Resources in public domain at a glance: Subject Gateways**

Gateways are portals to information that are usually limited to a specific domain or subject area. The resources accessible through these gateways are reviewed, selected, evaluated and catalogued by information professionals or subject experts. Some examples are:

❑ **Pinakes:A subject launchpad**<http://www.hw.ac.uk/libWWW/irn/pinakes/pinakes.html>

As the Internet grows in size it becomes increasingly difficult to locate relevant material. The Pinakes is a compilation of Internet resources, which links to the major subject gateways.

**Cogprints**<http://cogprints.org/>

CogPrints, an electronic archive for self-archive papers in any area of Psychology, neuroscience, and Linguistics, and many areas of Computer Science (e.g., artificial intelligence, robotics, vision, learning, speech, neural networks), Philosophy (e.g., mind, language, knowledge, science, logic), Biology (e.g., ethology, behavioral ecology, sociobiology, behaviour genetics, evolutionary theory), Medicine (e.g., Psychiatry, Neurology, human genetics, Imaging), Anthropology (e.g., primatology, cognitive ethnology, archeology, paleontology), as well as any other portions of the physical, social and mathematical sciences that are pertinent to the study of cognition.

▪ **Bubl Information Services**<http://bubl.ac.uk/>

BUBL is a UK-based interactive information service which provides links to over 12,000 internet resources in a wide range of subject areas. Initially designed as a resource for

librarians, it includes a directory of UK organisations and institutions, job postings, usergroup links, surveys and comprehensive archives. BUBL provides links to current editions of all major UK newspapers, as well as abstracts and selected full text from over 200 journals.

▪ **E-Print network**<http://www.osti.gov/eprints/>

Provides access to electronic preprints available from diverse sites. It is a searchable gateway to preprint servers that deal with scientific and technical disciplines.

▪ **WWW Virtual Library**<http://vlib.org/?/>

Catalog of Internet resources. Indexes cover a broad range of subject areas. Each entry within a subject area links to the appropriate Internet resource and is accompanied by a brief description and a relevancy ranking.

▪ **Infomine** <http://infomine.ucr.edu/>

A Web resource featuring well organized access to important university level research and educational tools on the Internet.

▪ **intute**<http://www.intute.ac.uk/>

A freely available Internet service which aims to provide a trusted source of selected, high quality Internet information for students, academics, researchers and practitioners in Science & Technology, Arts and Humanities Social Sciences, Health and Life Sciences.

▪ **Voice of the Shuttle**<http://vos.ucsb.edu/>

Made publicly accessible in 1995, this site began as an introduction to the Web for humanists. Its mission has been to provide a structured and briefly annotated guide to online resources in the humanities and associated disciplines.

▪ **Renardus**<http://renardus-broker.sub.uni-goettingen.de/>

Integrated search and browse access to records from individual subject gateway services across Europe. It provides a source of selected, high quality Internet resources for those teaching, learning and researching in higher education in Europe.


❑ **SocioSite**<http://www.sociosite.net/index.php>

Social Science Information System based at the University of Amsterdam

❑ **MathGuide**<http://www.mathguide.de/>

The MathGuide is an Internet-based subject gateway to scholarly relevant information in mathematics

❑ **Yenza!**


 means "do it" is a guide to using the Internet for research and teaching in the Social Sciences and Humanities.

also provide links to online resources relating to specific disciplines

**Social Science Research Network**

 Top Down Loads : Social Sciences


**Research Resources for the Social Sciences**

 Content to browse

 General resource searchers

**RefereE-Resources in public domain at a glance**

**Direct Search**

 A Growing compilation of links to the search interfaces of resources that contain data not easily or entirely searchable/accessible from general search tools

 **DMOZ** : Open Directory Project <http://dmoz.org/about.html>

The Open Directory Project is the largest, most comprehensive human-edited directory of the Web. It is constructed and maintained by a vast, global community of volunteer editors.

**E-Resources in public domain at a glance**

Indian Languages and Literature

❖ **Khoj Directory of Literature**<http://www.khoj.com>

❖ **Literature**

**Scholarly Societies**

■ Overview of Scholarly Societies

■ Search Engine of Scholarly Societies Project

■ Scholarly Societies by Subjects

■ Scholarly Societies by Country

■ E-Resources in public domain at a glance

Subject Specific Resources

■ SocioSite : Social Science Information System

■ Social Science Subjects

■ Electronic Journals and Magazines

■ Activism, Collective Action, Social Movements, Utopianism

- Sociology of Aging - Age Inequality, Ageism, Gerontology
- Social and Cultural Anthropology
- Famous Sociologists
- Sociological Theories and Perspectives
- Social Science Internet Resources : General
- Library of Congress : Social Sciences

### **Subject Specific Resources: Anthropology**

- Anthropology Resources on the Internet
  - Biographies
  - Human Culture
  - Anthropology Tutorials
  - Subject Specific Resources: Economics
    - Economic and Political Development: Information Resources
    - About.com on World of Economics
    - Other Resources
  - ✦ E-Journals
  - ✦ Selected Websites on Economics
  - ✦ E-Bibliographies
  - ✦ E-Glossary
  - ✦ E-References Sources
  - ✦ International Economists
  - ✦ Economics-India
- Subject Specific Resources: Geography
- ❖ India-Map
  - ❖ Census of India
  - ❖ Some other Maps
  - ❖ Geography Societies and Organizations
  - ❖ Encyclopedic Geography Sites



- ❖ Internet Resources for Physical Geography
- ❖ Gateway to Geography ( SOSIG)
- ❖ 50 Most Popular Sites in Geography
- ❖ Some more sites in Geography

Subject Specific Resources: Sociology

Some Important Website on Sociology

- Sociological Subjects
- A Sociological Tour through Cyberspace
- SocioSite
- Famous Sociologists
- Statistical Data – India
- Gateway on Sociology
- Subject Specific Resources: Political Science
- Selected Websites on Political Science
- Political Science Associations Worldwide
- E-Bibliographies
- E-Glossary
- E-References Sources
- Yale Global Online
- Social Science Information Gateway

Subject Specific Resources: History

- Internet Indian History Source Book
  - Ancient History
  - Medieval History
  - Modern History
- Multimedia Resources
- Ecosystem (Geography)
- Tsunami (Geography)

- How a Crater Lake is Created ? A presentation
- Market Monopoly
- Globalizing Inequality by P. Sainath
- Coalition of Black Trade Unionists (CBTU).
- Egypt: Gift of the Nile (History)
- Social Action
- Aristotle's theory of the solar system
- Keeping Kids Healthy: Overweight Kids - Is Your Child at Risk?