Subject Gateways provides search facilities of relevant information sources on the Internet and are created, designed, maintained and reviewed by librarians/information professionals and/or subject experts with the aim of providing access to high quality sources of information and contain the full range of subject oriented internet material which negate the possibility of repetition in the search results. The use of traditional cataloguing and classification aims to ensure accurate subject description. Thus the quality input provides a quality output search and it is for the user to decide whether the output is capable to match their requirement. Gateways also give an opportunity to authors/scholars/users to provide an input of information resource through its template, though it is further evaluated and assessed by gateway editors. Selection procedure, collection management policy, scope policy and reviewing the information Gateway has been included in brief. ICSSR is the sponsoring body of the Information Gateway of Social Sciences, thus the paper has been concluded by providing the recommendations for ICSSR.

KEYWORDS: Information Gateway of Social Sciences in India, social science information, Internet services, information services, social sciences in India, social science research
0. INTRODUCTION

Internet today contains huge amount of global information. To access the required, specific, relevant and quality information is not an easy job. The universe of knowledge is so vast that to find the desired piece of information on the web resources, search is done through the following search tools like:

- Subject gateways
- Virtual Libraries
- Rating and reviewing services
- Subject catalogues and directories and
- Search engines

Internet search engines automatically compile the files using the information that they find by web crawling. These indexes can then be searched by keywords to return records, which contain automatically generated descriptions of the resources, usually the first few lines of the resource itself. Search engines are good for finding lot of information, but the they lack metadata records and, classification and indexing for precise and effective retrieval.

Search engines, in a sense perform the job of public libraries on the Internet, while subject gateways are an academic or special libraries on the Internet and also support teaching and research on their respective subjects. 'Subject Gateways are Internet based services designed to help users locate high quality information that is available on the Internet. They are typically databases of detailed metadata (or catalogue) records which describes the Internet resources and offer a hyperlink to the resources. Users can choose to either search the database by keyword, or browse the resources under subject headings.

The information to be accessed has a definite purpose and theme. The theme is usually subject oriented, therefore to have an access to subject oriented quality information one must search through the subject gateways. Subject gateways have an input of identified, selected, evaluated and assessed subject oriented information sources. A quality input provides a quality output search and it is easy for the user to decide whether the output is capable to match their requirement. These type of search facilities are created, designed and maintained by librarians /information professionals and /or subject experts with the aim of providing access to high quality sources of information, and also contain the full range of subject oriented Internet material which negate the possibility of repetition in the search results. The use of traditional cataloguing and classification, aims to ensure accurate subject description and to facilitate the retrieval. Evaluated/assessed information sources also provide a complete guide to determine the scope,
value, purpose, comprehensiveness, up-to-date ness, usefulness and format of the information source accessed through the subject gateways on the Internet.

Gateways also give an opportunity to authors/scholars/users to provide an input of information resource through its template, though it is further evaluated and assessed by gateway editors keeping in view the audience and context/content for inclusion into the subject gateway. The accepted resource is then classified, indexed and catalogued.

Quality information is the upper most criteria for selecting an information source to be included in Information Gateway of Social Sciences. 'Quality criteria is associated with content, which normally include authority, authenticity, currency, timeliness, consistency, coverage and scope; while additional considerations are linked with the presentation, visual acceptability and ease of use and navigation around the site.' The inclusion of metadata within the source (which is located in the <HEAD> </HEAD> section of the HTML page) is used to aid the identification, description and location of electronic resource on the Internet. The use of metadata ensures effective indexing and retrieval and is thus required to be provided on every HTML document. 'Equally clear is the need for an enforceable standard for the inclusion of metadata that would enable search engines to function both efficiently and to a recognized pattern.

Quality trademark also require the information sources to be selected on the basis of selection criteria, scope policy and collection development policy framed by the gateway authorities. Librarians /Information professionals and different subject specialists are responsible for the collection management and maintenance of information resources of different subjects. A catalogue card is created for each resource which contain information such as title, description, subject keywords (by using controlled vocabulary of subject headings), class number (by using standard scheme of classification) and site address. This record of catalogue card is added into the database of subject gateway to ensure access to identified, selected and evaluated high quality resources.

Ms. Emma Place has invited international collaboration on Internet Subject Gateways at IFLA section on Information Technology. A distributed model is suggested, where each country takes responsibility for describing the high quality resources available on the National Network. The technologies and standards already exist to achieve international collaboration. But Human Networks are required that can maximise the potential of these standards and technologies and the library community has both the expertise and the commitment to develop these valuable Internet search tools. Ms. Emma Place has also indicated the tools for building large-scale Internet Subject Gateways. DESIRE as developed tools and methods for the development of large-scale Internet subject-gateways. It is also working with both library and Internet standards organisations to develop standard practices for developing gateways, to ensure that they are interoperable and can work.
ROADS is an open source set of software tools which enable the set up and maintenance of web-based subject gateways. It was developed as part of the UK's Electronic Libraries Programme but is now freely available for anyone to use. The software includes the database technology required to set up a gateway, the administration centre required to facilitate remote cataloguing via the WWW and everything else needed to run a gateway. The ROADS open source software toolkit is being produced by a consortium of developers with expertise in network based resources identification, indexing and cataloguing. This has resulted in a standard based approach to software development making it compatible with current and developing indexing and cataloguing requirements. In addition there is ample documentation and online support for people interested in using the software for either experimental purposes or service provision.

IMesh, an international gateway community is a collaborative network involving key players in the world's subject gateway community. One of the main aims of IMesh is to explore the potential for collaborative development of gateways internationally. A report of the meeting of the first IMesh workshop held in June 1999 at Warwick in U.K. attended by gateway providers from around the world is available on the IMesh website. An IMesh discussion list exists and those interested in international collaboration amongst subject gateways are invited to join for exchanging ideas and technology for promoting the subject gateway movement.

Gateways are working with W3c (World Wide Web Consortium) to see how RDF (Resource Description Framework model and syntax specification which aims to provide a basic infrastructure on the web to support the transfer and processing of metadata) can support high quality metadata collections. Librarians can work on creating metadata records for Internet resources and on finding their place in the metadata community. They can also start becoming familiar with the new metadata and Internet cataloguing standards so that all the records are compatible.

1. SHYAMA PRASAD MOOKERJEE INFORMATION GATEWAY OF SOCIAL SCIENCE

'No one can enter knowledge society successfully without being armed with the knowledge of social sciences. If the products of the natural sciences are compared to a computer (whatever be the size, a PC or supercomputer) the software (system software and the application software and various other knowledge /skill inputs relating to it) is the social science.' (Inaugural address by Hon'ble Professor Murli Manohar Joshi, Minister for Human Resource Development, Science and Technology and Ocean Development, Govt. of India).

To promote high quality access to social science knowledge, truly and in real sense inauguration of Shyama Prasad Mookerjee Information Gateway of Social Sciences http://www.icssr.org/infogatefinal.htm was done by Prof. Murli Manohar Joshi, Minister for Human Resource Development, Science and Technology and Ocean Development, Govt. of India on 12th May 2000.
The main mandate of the Gateway is to provide fast and easy access to high quality, relevant information sources, data, web pages, multimedia files and other relevant sites in social sciences available on the Internet via online catalogue where each resource is described and indexed under appropriate category.

The Gateway is a departmental store or special library of linked collection of selected high quality Internet based social science resources. It provides link with brief description to scholarly social science resources along with respective Uniform Resource Locator (URL) for its full text source document. Users can search the database either by keywords or browse the resources under subject headings.

**In this Gateway links are provided to:**

- All social science subjects as enumerated by Indian Council of Social Science Research
- Indian social scientists
- Completed and on-going social science research projects
- Forthcoming conferences including training workshops for accessing digital and Internet based social science information
- Social science institutions / libraries / teaching departments / ICSSR network of regional centres and its financially supported research institutes
- Websites of other existing Indian Portals, Information networks e.g. INFLIBNET, DELNET etc./ International Gateways / virtual libraries in social sciences
- Career development / job opportunities for social scientists / researchers in all sectors.

**Vision**

- Social scientists shall be provided SDI Service by providing the information for currently added relevant Internet resources. Providing the opportunity to social scientists to submit online the information of newly created Internet resources to the catalogue of the Gateway.
- Keeping Indian databases and ICSSR journals online.

**Cyber Cafe**

- Cyber Cafe for social scientists to access Internet based resources has been developed. It is a paid service. The social scientists can make use of the service after paying the required amount.
- Short term on-going training courses for accessing digital and Internet based social science
information for social scientists and information professionals working in academia, business, government, NGO and others are being conducted all over India.

2. COLLECTION MANAGEMENT POLICY

The collection management policy is to provide guidelines for consistently developing the collection, evaluation and maintenance of social science information sources to be linked in Information Gateway of Social Sciences. This policy shall direct orderly selection, verification, maintenance and provision of access not only to collection developers (i.e. librarians/information professionals and/or subject experts), but also to social science scholars/users who would have access to the collection. This will be a link of collection of high quality information sources available on the Internet either in the form of full text or in the form of content/index and/or abstract or just the bibliographical details of the document with brief description and pointing towards its location in social science libraries in India. However, efforts shall be made to make it a fully linked collection and pointing to the document available on the Internet.

The objectives of collection management policy are linked with the objectives of Information Gateway of Social Sciences i.e. to provide fast and easy access to high quality relevant social science news and information to social scientists working in academia, business, government, NGOs and others.

Indian Council of Social Science Research is the main funding body of this gateway. Therefore the collection development process will also support the objectives of ICSSR. URL:- [http://www.icssr.org](http://www.icssr.org)

Indian Council of Social Science Research is the Funding/Sponsoring Body of Information Gateway of Social Sciences.

Under its umbrella ICSSR has two documentation centres:

- National Social Science Documentation Centre (NASSDOC)
- Asian Studies Documentation Centre (ASDOC)

Therefore, the collection management policy of IGSS is to support the cooperative collection development of Indian as well as Asian studies in social sciences. Both the documentation centres are equipped with library facilities for social science research scholars. As the network connection the world wide access to information, these will be able to cater their needs through world wide access as well as ownership.
Efforts are being made in:

- Keeping NASSDOC databases and ICSSR journals online.
- Converting core Indian social science journals, research reports, and working papers into digital format.

Therefore to start with collection management policy is oriented towards providing description of social science Internet resources as well as other high quality social science information resources that can support research, teaching and learning in the social sciences. University social science departments / institutions and others for which description may not be available will have directory listing with contact points.

Categories of collection:

- Article / conference paper
- Bibliographic databases
- Bibliographies
- Books
- Dissertations and research reports
- Abstracting and indexing journals
- Journals (full text)
- Directories, handbooks etc.
- Conference proceedings
- Dictionaries and encyclopaedias
- Newsletters
- Institutions and governmental bodies
- Educational materials
- News

The above categories of collection must cover the scope policy of the gateway.

Collection Priorities:

The content and description of current issues of serial publications and serial conference proceedings are
to be linked immediately after their arrivals. The collection policy of the gateway must take into consideration the current political and economic events and current research etc. that information resources of these current issues irrespective of the format must be linked in the gateway.

**Filling the gap**:

The gateway intend to include the resources in all areas of social sciences, though for some subjects many more resources are available than others. In subject areas where few resources are available, the quality selection criteria regarding content, form and maintenance may be less accurately applied. But with time with emerging of that area more popular and extensive and consequently availability of more resources on that area the already existing resources may be updated or replaced.

**Collection Maintenance**:

The editing and maintenance of the collection shall be done from time to time keeping in view the value, availability, usefulness, accuracy, stability, time sensitiveness, change of title of a journal, change of format of information e.g. availability of the document or service online which has enhanced the users' access to information etc. and alternative source with more comprehensive coverage and to correct any errors made in the original record and of course to add fresh documents and services as and when available. Also to verify the freshness of already available documents and services and also their links.

Collection management policy will also include the database management policy i.e. updating and editing of the catalogue record, classification number, subject keywords as and when the weeding / adding of the record is done. It is very important to pay special attention to the accuracy of the description of the record on which the user rely and also the accuracy of the spellings of a subject keywords adopted. The search engine shall not differentiate between the two spellings of the same word and the record with wrong spelling may be lost for a while if it is not searched by another keyword given to the same record. Equally important is to use the controlled vocabulary keywords consistently.

**Reviewing the Collection Management Policy**:

Librarian / information professionals and subject experts shall periodically review the Collection Management Policy with the changing needs, level, development, availability of form of information sources and availability of information sources online etc. The policy shall be kept alive as to reflect the scholar's current needs and requirements and provision for inclusion or exclusion of relevant changes as well as the innovation of new technology affecting the format of the document or the service and also the process of evaluation of that format.
4. SELECTION PROCEDURE

Selection of high quality information sources is a continuous process affected by the users' need, availability of resources and also the format of resources and the new technology in developing the format of resources.

- Ensure the value, level and usefulness of the source and also ascertain that no such source is being duplicated or already existing in the database.
- Match the subject area of the source with the list of subjects covered in the scope policy of the gateway.

Selecting the content:

- Identify the content of the source to ascertain the quality of information actually contained within the source. Content criteria should take precedence over form criteria. It is very important to focus on content of material rather than the format of the material. Quality and level of thought content is important irrespective of the form in which it is available.
- Identify the statement of the purpose, scope, limitations and intended user stated within the source and does the resource fulfill the stated purpose.
- Identify the subject area and the types of material covered e.g. full text journals or books, bibliographical database, abstract database, directory database, library catalogue, publisher catalogue, archive catalogue, and CD-ROM catalogue etc.
- Check the language of the source.
- Browse the source itself to determine the comprehensiveness, level of details, retrospective coverage, depth and limitations of that particular subject area. Is the information really full text or just the bibliographical details? Is the title informative?
- Identify the hypertext links or the references or bibliography at the end of the source and whether they add value to the information source.
- Knowledge and expertise in an area to promotes reputation on which an individual can rely to
ascertain the quality of information. Identify if the source written by subject expert or produced by an organisation /institution /publisher /sponsor with recognised knowledge and expertise in the field.

- Identify the contact details i.e. address, phone number and e-mail address for author and publisher to support claims of authorship, sponsorship etc. Is there a biography of the author highlighting his education, occupational background and his/her previous publications if any.

- Identify the review(s) of the information source available in any journal which determine the quality of the source.

- Identify whether information is through editing process or based upon research or survey etc. by authoritative individual or institution.

- Identify the validity and accuracy of information source by looking upon its spellings and grammar etc. index of contents and keywords which determine the comprehensiveness of the information source.

- Identify the counter on the site which determine the popularity and reputation of the source.

- Identify the address of the site at the end of web address i.e. .ac , .edu , .org , .gov which determine the quality, authority and reputation of the source.

- Identify the HTML page of the information source by looking into its <HEAD> </HEAD> section whether metadata containing all the relevant keywords is given which ensure effective indexing and retrieval and thus provide reliable access to information sources.

**Selecting the Form:**

- Identify the form of Information which relate to medium, design and presentation of the resource including the ease of navigation and provision of user support etc. However resources with valuable information content should not be rejected on form criteria alone.

- Is it easy to navigate the source and does not take more than three clicks or links to get to the real information?

- Can the source be reliably accessed? Is the site stable and always available?

- Can the source be accessed fast and easily? Whether images are logical to the text and add value to the source or too many images which slow down the speed of access and downloading?

- Whether enough linkages are there to go to top, back, next and home page etc. and can particular content be located from any other page?

- PDF document can be displayed and printed in a form which is virtually identical to an original paper based publication which make text and graphics more sophisticated than is possible using HTML format. Check whether document is available in PDF format to be read with Acrobat Reader.

- Is registration, password or membership of an organisation is required to access and is it possible to bookmark a page? Is registration straight forward?
· Is there a statement of copyright ownership?
· Some e-journals provide free limited access to the registered users and full text access to the subscribers. Check how useful and valuable is the free information? Layout of information
· Is the source clearly, logically and consistently presented and arranged?
· Is the information on a page well categorized and well written with appropriate heading, image or graphic where necessary.
· Is it aesthetically and logically pleasing and also easy to read?
· Are the links easily understandable, meaningful and also searchable and how are they defined? Do they interrupt the flow of the text?
· Are there sitemap, contents, index, menu system and instructions about search facility e.g. basic search, advanced search and expert search etc and how effective is the search facility?
· Are frames used and are they necessary, meaningful and add value to present the text?
· Are there any advertisements? Have they been used appropriately or do they distract the user from the information or the main purpose of the page? Easy ness to use
· Is the source easy to use, easy to move around, user friendly and intuitive or training and /or expertise required to use the source effectively?
· Is any help information available and is it clear, sufficient, valuable and useful to guide the user in locating the information?
· Is there customer support and training provided? Is there an e-mail and interactive 'helpdesk'? Is there a telephone help line? Is it valuable and useful? Comparison with other similar sources
· Identify if any equivalent or similar source is available on the web? In comparison to others compare the purpose, coverage, reputation, accuracy, up-to-dateness, accessibility, presentation and arrangement, easy ness to use and cost of the source etc.
· Is the source unique in terms of information and format or does it offer any unique feature or facility?

Selecting the Process:

· Identify the processes set up to support the resource to ensure that the resource is current, stable, adequately maintained, and also kept up-to-date and stable.
· Keeping the source up-to-date:-
· How up-to-date the source is and it is maintained also up-to-date?
· Identify the statement when the source was last updated, when it next be updated, frequency of
updating and the updating process including the maintenance of hypertext links also.

· Do the stated dates correspond to the information in the source? Is the information durable in nature?

· Is the information time sensitive (e.g. timetables, schedules and conference announcements) and how current is this information and how frequently it is kept current or up-to-date?

· Is the information of a type that has a limited period of use? How often is this improved, enlarged, modified and updated?

· What is the policy and process of maintenance and knowledge and expertise of the maintenance staff?

5. SCOPE POLICY

The term social science defined in Webster's International Dictionary is as given below:

**Social Science**

· The branches of science that deal with the institutions and functioning of human society and with the interpersonal relationships of individuals as members of society.

· A science (as economics or political science) dealing with a particular phase or aspect of human society.

**Scope of Social Sciences**

Indian Council for Social Science Research considers for support research proposals on any subject or theme, which have a significant social science orientation. The disciplines recognized for such support are:

· Economics
· Commerce
· Education
· Management
The social sciences also include social change, political institutions, women's studies, entrepreneurship, and social legislation as well as theory and methodology in social science research.

The above social science subjects form the scope of ICSSR and these shall be considered to be accepted for the scope policy of the Gateway. Resources that consist mainly of advertising shall not be considered for inclusion into the gateway. There should be sufficient information of metadata within the resource to create a catalogue record. At present sources particularly of India and also of Asia in English language only shall be considered for inclusion. The detailed list of subject heading shall be made to make it available in the Scope Policy of the Gateway.

6. REVIEWING INFORMATION GATEWAY OF SOCIAL SCIENCES:

Information Gateway of Social Sciences shall be reviewed periodically for maintenance of its collection to cater the current needs of the users. Evaluation shall be made whether the objectives of the gateway are being achieved, how well and effectively are these being achieved? Has the gateway enhanced the access to high quality social science information sources? Social science scholars shall also be approached to collect their healthy/unhealthy views to make the access to the information more efficient.
and effective.

7. CONCLUSION AND RECOMMENDATIONS:

Information Gateway of Social Sciences is still to be achieved and leading towards to achieve its goals. By stepping into the gateway, social science scholars will find themselves in a big social science departmental store, navigating into the links, searching their needs and finding high quality social science information packed efficiently and effectively and also directing and linking them to something more or sufficient. Step out by these scholars shall load them with smile, satisfaction and packages of high quality social science information.

If we look at the objectives of ICSSR given to sponsoring and administering fellowship for social science research programme. The outcome of these research is the research project report which the scholars are bound to deposit which is at present submitted in mimeograph form and collection of these is maintained at NASSDOC library. If the ICSSR gives an incentive to the researchers and make them obligatory to submit the report in electronic format as a HTML document that can be entered and have a link in the gateway without much efforts. Similarly the outcome of a report of the seminar, workshop is in print form and instead of ICSSR assisting the publication of journals and books in print form the policy can be amended to convert them in.

REFERENCES


Journal reference


The EEVL approach to providing a subject based information gateway for engineers *Program* V32(3)J1 1998 p.205-223.

Belcher, Martin; Place, Emma and Conole, Grainne Quality assurance in subject gateways: Creating high quality portals on the internet. *Quality Assurance in Education* V8(1)2000 p.38-47

Conference paper


Website

SOSIG Selection Procedures http://www.esrc.bris.ac.uk/desire/esix.html

SOSIG Selection Criteria http://www.esrc.bris.ac.uk/desire/ecrit.html

SOSIG Scope Policy http://www.esrc.bris.ac.uk/desire/escape.html

SOSIG Collection Management Policy http://www.esrc.bris.ac.uk/desire/ecollect.html


ICSSR (Indian Council of Social Science Research) http://www.icssr.org

ROADS (Resource Organization and Discovery in Subject based Services) http://www.ilrt.bris.ac.uk/roads
**BRIEF BIOGRAPHY OF AUTHOR**

*Mrs. Om Kumari Choudhry* obtained her M.A. (History) from Panjab University, B.Lib.Sc. and M.L.I.Sc. from University of Delhi both with first class in 1968 and 1982 respectively. Attend IGSS 2000 International Graduate Summer School from University of Wales, Aberystwyth in 2000. Began her career in 1968 and worked in NMML, New Delhi, Alokudyog Services, New Delhi and joined NASSDOC, ICSSR, New Delhi in 1971 where at present working as Deputy Director. She has about 35 publications to her credit. Her main interest and specialization lies in Automation in Library and Documentation Services.