

Evaluation of Electronic Reference Sources

S P Singh

Abstract

Discusses the impact and acceptability of information technology (IT) in libraries and information centres. Mentions how the role of reference librarian is changing with the change in the mode of production and access to reference sources in the libraries. It also adds what is expected of reference librarian to face the challenges of today. Emphasizes the need of knowing how to evaluate CD-ROMs and online reference sources, enumerates the important characteristics of reference sources, finally describes in detail various criteria which can be used for evaluation of e-sources.

1. INTRODUCTION

Today information technology (IT) has been playing an important role for every section of the society. Its impact is visible in almost all walks of life and libraries are no exception to it. Since the users today have multi-dimensional requirements, IT is gaining fast access in libraries, information centres and documentation centres to meet their changing requirements and provide value-added and need-based services to its users. It has affected not only the way of acquiring and processing the documents/information in the libraries but also the way of providing the reference service to the users of the library.

The field of reference service is very vast and dynamic. The basic purpose of any library however small or big it may be, remains the same i.e., to collect, organise and disseminate the information to meet the information requirements of its users. Technological development particularly with the introduction of computer technology, communication technology, printing technology, reprography, etc., have added new dimensions to the role of librarians in the dissemination of information.

With the introduction of IT, advances have been made not only in the format of reference sources but also in the manner of providing reference service. One can have direct access to computerized databases via terminals or the needed information can be made available to the client through internet in no time, irrespective of where the information is available. Today the emphasis in the libraries is shifting from 'acquisition of documents' to 'access to information' thereby increasing the scope of reference service to 'no limit extent'. Libraries are passing through a revolutionary phase which has changed the way of working of professionals in the libraries. Under the changing scenario, library professionals are expected to be well acquainted with all these developments which would help to meet the challenges of today. One should know how to use computer for providing reference service, what the various forms available of electronic reference sources are, how to access them, and how to select the best of these sources.

Today any reference librarian can provide a wealth of information by acquiring non-print form of documents such as CD-ROMs and online databases. Unlike print documents, for accessing the electronic documents one has

to rely upon the equipment required to access such documents. Till recently paper form of reference sources was the only form available in the libraries for the users. The students in library science schools in India were taught how to evaluate the print form of reference sources to enable them to acquire the best reference sources in their library. But since most of the libraries today are going for computerisation and are acquiring reference sources in CD-ROMs and online forms, it has become necessary to have a knowledge regarding how to evaluate CD-ROMs and online reference sources for their acquisition in the libraries.

2. CHARACTERISTICS OF REFERENCE SOURCES

- ❑ These form a special category of documents meant for consultation or reference and not for consecutive reading.
- ❑ These are secondary or tertiary sources based on primary or secondary sources of information.
- ❑ Usually these are compiled works for which information is gathered from a large number of sources. These sources do not contain new knowledge, but contain the knowledge which is already available somewhere.
- ❑ In such sources information is organised according to some definite artificial plan of arrangement which can provide fast access to information in the most convenient manner.
- ❑ These sources have disjointed entries, having no line by line or para by para relationship as is there in other sources. So they have no continuity of thought contents as a result, these cannot be read para by para or page by page.
- ❑ Such sources are comprehensive in coverage (scope) and condensed in treatment.
- ❑ These are not 100% reliable for the data or information provided therein.

3. EVALUATION

Evaluation of reference sources in a library context means assessing the value of the source according to the requirements of the

library, based on users' level of education. For any library, the process of evaluation is very important to develop the need-based best collection. It helps to assess the value or evaluate the quality of a particular source and also its suitability for inclusion in the library collection depending upon the readership of the library. Various approaches have been suggested by different authorities like Katz, Smith, and Gates, etc. Although originally the evaluation criteria were developed for printed sources, but they can equally be used for evaluation of electronic sources (e-sources). However, in case of e-sources some additional points are also needed.

3.1 Criteria for Evaluation

With the tremendous inflow of information being generated from vast range of sources, it has become essential to evaluate the information for conducting quality research. For this purpose, each source of information must be reviewed with due care to ensure the authority, accuracy, quality, reliability and objectivity of the information one uses. This section describes the general criteria which may be used for evaluation of electronic (internet) reference sources.

(a) Purpose

The first thing is to find out the purpose of publishing the source? Is it to inform, to sell or to entertain? Websites can be misleading in their stated or implied purpose. Therefore, purpose of site should be carefully seen.

(b) Authority

It is necessary to find who is the author, is he/she a known expert/scholar? What is the author's occupation, position, title, education, experience, etc.? Is the page signed? Is the author qualified to write on the subject? What were the sources (primary or secondary) of author's information/knowledge? Are these sources cited as bibliography? Has he explored new sources, and were they well chosen and sufficient for the purpose? In case of web sources, it may be difficult to determine authors and their qualifications (even if the page is signed) as any one can publish anything on web, moreover, these are not regulated for quality and accuracy as a

result, user has to be more alert to know whether the information can be verified? Is the information filtered i.e. peer-reviewed? Has it been refereed? One should check URL domain for source of information and find who the publisher of document is and what are its credentials. Is the publisher well known with good experience and reputation for issuing reference sources. Is he a recognised authority? Availability of email address, phone number of authors/publishers can help in authentication of information and sources.

(c) Accuracy

Accuracy is a very important characteristic for any source so one should assess if the information is accurate? Can it be checked for its accuracy? Is there an editor or someone who verifies/checks the information? How does it compare with other sources of information? Are the sources for factual information clearly listed for verification of information? Is it clear who has the ultimate responsibility for accuracy of information? Has the information been reviewed or refereed? Is it free from grammatical, spellings, or typographical errors?

(d) Objectivity

A standard source is the one which reflects clear objectivity of information, therefore one should check is the information biased? Does it project all perspectives on an issue? Is the author's point of view objective and impartial? Does it reflect the author's (bias) affiliation with an organisation? Whether the information provided is a fact, opinion, or propaganda? Is the information free of advertising? Does the content of the page has an official approval of the institution? One should also find when the information was published and is the information in its original form or has been revised?

(e) Currency

Although the currency of information usually depends upon the nature of the topic. It is particularly important in science and technology where information changes very fast. However, a good reference source should be updated regularly, therefore, one should always try to find when the information

was first published? When it was updated and is it recent enough for the needed purpose? Is the site updated regularly? Is there any indication when the site was last updated? Dates are sometimes absent or may have different meanings like date of creation, placing on web or last revised, so one should check the dates carefully.

(f) Reliability

It is important to check the reliability and credibility of sources. Is it authentic? One should ascertain why to believe information given on the site? Does the information appear to be valid and well researched or it is unsupported by evidence? Is the information unique or has it been copied? Which institution supports this information? Is the supporting institution well known? Are there some non-web equivalents of the material to verify the information?

(g) Coverage

Is the source comprehensive enough in its coverage for the indicated needs of the audience? What items are included? What subject area, time period, formats, or type of materials are covered in the site? Does the site contain original information or simply links? If links are given, what kind of sources are linked, are these related to the topic and useful for the purpose of the site? Are these links still current or they have become dead ends? Have these been evaluated or annotated in any way?

(h) Format and Presentation

Is the information easy to get? Does the source contain a table of contents and/or an index to facilitate the use or to find the specific information one needs? How many links does it take to provide the needed information? Is the arrangement of links uncluttered? Does the site has its own search engine? Is the site easily browsable and searchable?

If graphical images are included, what is the quality of these graphical images? Do these images enhance the understanding of the resource or distract from the content?

(i) Special Features

Does the source contain graphs, charts, tables, maps, or any other special features that adds to the usefulness of the source? Does it use header and footer to indicate information about the author and source?

4. EXAMPLES OF E-SOURCES

Now a good number of reference sources are available on internet and CD-ROMs, some important ones are given below:

□ On Internet

- ✧ Encyclopaedia Britannica Online
<http://www.eb.com>
<http://www.britannica>
- ✧ Rogets International Thesaurus Online
<http://www.thesaurus.com>
- ✧ <http://www.encyclopaedia.com>
- ✧ Webster's Dictionary
<http://www.dictionary.com>
- ✧ <http://www.m-w.com>
- ✧ Encyclopaedias and Almanacs
<http://www.virtualref.com/libdocs/>
- ✧ Newspapers Directory
<http://www.newsrack.com>
<http://www.samachar.com>

□ In CD-Rom Format

CD-ROM is another publishing medium falling under the economic category of electronic sources available in most of the Indian libraries. It is capable of containing enormous quantity of information. Most of the Indian libraries are using this medium these days to fulfil their users' requirements in an economic way. This form has been found to be economic, particularly when one and the same source is to be used by many users again and again. There is a long list of reference sources available on CD-ROMs, some of the important examples are given below:

- ✧ Encyclopaedias
 - Academic American Encyclopedia
 - McGraw-Hill Encyclopedia of Science & Technology
 - New Encyclopaedia Britannica
- ✧ Bibliographies
 - BIP Plus

- Books Out of Print Plus
- Ulrich's International Periodicals Directory
- ✧ Indexing/Abstracting Sources
 - Cumulative Book Index
 - Library Literature
 - Library & Information Science Abstracts
- ✧ Dictionaries
 - McGraw-Hill Dictionary of Scientific & Technical Terms

CONCLUSION

For evaluating web documents, author or contact person with address (e-mail); document URL, including an institution identifier (e.g. edu); date of creation or revision and link to sponsoring institution website may be used. For evaluating e-sources one should be very critical of any information found on web, and it should be carefully examined. Information available on the internet is not regulated for quality and accuracy, therefore it is particularly important to evaluate the internet resources or information. Since anyone can publish anything on web and it is often difficult to determine authorship of web sources, therefore, the responsibility of the librarian increases manifold to evaluate such resources still more carefully. Web pages are susceptible to both accidental and deliberate alterations and may disappear without any notice. Other sources like print may also be used as they may be sometimes more comprehensive in nature. As there are few quality controls on the internet, one must use the same guidelines as for printed sources but apply these guidelines even more rigorously. Most important thing about internet sources is to know links given to other web pages are current as well as the qualitative in nature.

FURTHER READINGS

1. Choudhary, G.G. & Choudhary, Sudatta. Searching CD-Rom and online information sources. Library Association, London, 2001. pp. 40-45.

2. Large, J.A. Evaluating online and CD-Rom reference sources. *J Librarianship*, 1989, **21**(2), 87-107.
3. <http://www.library.georgetown.edu/internet/eval.html>
4. <http://www.merlin.alleg.edu/employee/h/hmccull/eval.html>
5. <http://www.goshen.edu/library/eval.html>
6. <http://www.bailey.uvm.edu/ref/evalsources.html>
7. <http://www.library.usm.maine.edu/guides/webeval.html>
8. <http://www.sosig.ac.uk/desire/ecrit.html>
9. <http://www.lib.nmsu.edu/instruction/evalcrit.html>
10. <http://www.lib.purdue.edu/ugrl/evalinfo.html>
11. <http://www.library.cornell.edu/okuref/research/webcrit.html>
12. <http://www.lib.berkeley.edu/teachinglib/guides/evaluation.html>
13. <http://www.seattlecentral.org/faculty/kanna/lib/evaluation.html>

Contributor: Dr. (Mrs.) S P Singh, Reader, Dept of Library & Information Science, University of Delhi, Delhi-110 007.
