

## Selection Criteria for Electronic Resources

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### ABSTRACT

*The availability In Electronic Format of scholarly and scientific literatures and other forms of information relevant to the needs of library users has profoundly altered the challenges faced by collection managers. Although the traditional goals of achieving quality, relevance, and balance at a fair price still animate most collection-development efforts, judgments about these attributes of resources have become more ambiguous. The traditional standards have also been joined by new and highly important criteria which include the definition of the allowable user group and the purposes for which use will be permitted, multi-faceted concerns about the functionality of resources, and concerns about the availability of permanent archives. The paper overviews the tools used for selection criteria of electronic information resources.*

**KEYWORDS:** E- Resources, Databases, Quality, Library Users.

### 1. INTRODUCTION

Since past few years' information have begun to appear on the Internet. As a result, Librarian and information specialists from all over the world have started to evaluate electronic information resources (e-resources) of data, applying standards tools both different and the same as those used for print data.

The main intension is to achieve the highest quality of access and information throughout the World Wide Web (WWW) virtual library. Unfortunately, ultimate standards have yet to be agreed, even though some criteria do already exist. It has not been possible to adapt traditional selection criteria because the very newness itself of electronic resources demands new standards. The Internet carries both non-professional and professional information. There is distinct difference between a site and a database. An internet 'site' can be any URL in the Internet, which contains a document, a collection of data, or just an index to some sources gathered by some good – hearted persons.

The concept of electronic resource is regarded as the mines of information that are explored through modern ICT devices, refined and redesigned and more often stored in the cyber space in the most concrete and compact form and can be accessed simultaneously from infinite points by a great number of audience.

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The phrase “electronic resources” has broadly been defined as, information accessed by a computer, may be useful as bibliographic guides to potential sources but, as of yet, they frequently appear as cited references in their own right (Graham, 2003). Moreover, e – resources refer to that kind of documents in digital formats which are made available to library users through a computer based information retrieval system. The internet is said to be the right and most extensively used channel to catch hold of the majority of e-resources through different search engines and of course, some offline databases in CD/DVD formats that can even be accessed without the help of internet.

According to ODLIS (Online Dictionary for library and Information Science) Electronic resources are “ Material consisting of data and/or computer programme(s) encoded for reading and manipulation by a computer by the use of a peripheral device directly connected to the computer or remotely via a net work such as the internet (Patel and Patnaik<sup>2</sup>, 2005).

## **2. SELECTION OF E-RESOURCES**

The common types of e-resources that will be considered are;

- Databases,
- Continuing education sites,
- Electronic books/monographs,
- Electronic full text journals,
- Internet sites,
- Reference Tools,
- Teaching and education materials, etc.

The following primary and secondary criteria should be used to selecting all types of e-resources.

- Primary Criteria
- Secondary Criteria

### **2.1 PRIMARY CRITERIA FOR SELECTION OF E-RESOURCES**

#### **2.1.1 RELEVANCE, CONTENT AND SCOPE**

E-resources will be selected to support the information needs of the primary users, usually of faculty, preceptors, staff, students and others who rely on the information services provided by LIS network. The selection of materials will be based on the user’s real and perceived needs through a variety of methods including committees, focus groups, surveys, advisory boards and user recommendations. The professional librarians will also use their expertise to identify subject areas that need to be strengthened or added.

The selection committee will identify resources generally available through the internet or commercial resources and will try to minimize duplication of resources. The library will not redevelop collections of materials that already exist, but will link to sites with existing materials or web portals on specific subject areas. Special consideration will be given to resources commonly held from other libraries that provide high quality information, but are not accessible by all users.

### **2.1.2 ORGANIZATION OF MATERIAL**

Preference is given to products searchable through a variety of ways, such as keyword, subject and name searching. In the case of databases, the availability of Boolean operations and specialized commands, such as the expansion or concepts, cross searching and linking capabilities between resources are to be considered. An advanced feature that may increase the value of the product and use of a common or similar interface for several tools is an important consideration from a user's perspective.

Customization of the interface can be an important feature, if it allows the creation of individual profiles that meet specific information needs of preferences. Other features to facilitate use and navigation should include menus, clear directions; help screens and intuitive navigational tools. Requirements for plug-ins or specialized materials must be reviewed, since this can impact the user's ability to fully utilize the resources.

### **2.1.3 QUALITY OF RESOURCE**

The quality of an e-resources title can best be determined by collectively and weighing several factors: authority, content, currency and the special attributes of the work.

**Authority** : Expertise of authors or editors, the sponsors / producer and the possible impact on content, reputation of the publisher, lack of bias, advertising – amount, type, distraction from content and usefulness.

**Content**: Clinical and educational relevance, accuracy and appropriate level of content, completeness of resources.

**Currency and Timeliness**: Up-to-date information and frequency of updates.

**Special Attributes**: Performance and reliability – speed of downloading and response time, search capabilities and protection of privacy, statistical reporting to support selection of the resources and its use, acceptable formats for full text and unique attributes and functions that set it apart from other resources, such as images, superior indexing, special search interface, etc.

## **2.2 SECONDARY CRITERIA FOR SELECTION OF E-RESOURCES**

### **2.2.1 COST**

The costs of equipment and support requirements, as well as licensing fees must be considered in addition to the purchase price of the product. Vendor pricing formulas based on the number of users, institutions etc. must also be accommodate individual and institutional users whenever possible.

Other costs must also be considered when acquiring an e-resource:

- Staff time to required to negotiate the contract, set up the resource and then maintain it,
- Password or account maintenance.
- Additional charges for technical assistance or support desks.
- Staff time spent assisting users with technical issues.
- Training costs.
- Indirect costs.

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### **2.2.2 ACCESS CAPABILITIES**

Access should be through a vendor supplied server whenever possible. If the resource must be mounted on a local server, the cost of equipment, maintenance and staff time must be evaluated. Access from narrow bandwidth services must be evaluated to determine performance issues. The use of the resources should be platform independent and utilize the program. The standard browser should be able to interface with the product. The Authentication protocol for connecting to the resources must be reviewed. A final consideration is whether the resource will be accessible through institutional firewalls and if the vendor can provide technical assistance or advice for working with this security measure.

### **2.2.3 SYSTEMS AND TECHNICAL SUPPORT**

Vendor support in terms of technical assistance to library and users must be carefully evaluated. Criteria to be considered are:

- Vendor helpfulness, expertise, referrals and follow-up.
- The hours that technical assistance is available.
- Availability of online help.
- Knowledge and responsiveness of account representatives.
- Management of passwords/Ids and registration of clients.
- Availability of direct technical assistance for clients.
- The number of people who can act as contact points for the vendor.
- Regular announcements and communications from vendor.

The amount of local technical support and staff time required must also be assessed. Access to resources through vendor or local sites must be evaluated in terms of performance of the system at peak loads; performance of the internet in retrieving files, printing documents and speed at peak times and the need to deploy client software on the local desktop computers. The vendor's licenses should state their responsibility for ensuring reliable service and their response time if problems do occur.

### **2.2.4 SIMULTANEOUS USER**

The number of simultaneous users supported by the system must be sufficient to meet the needs of the primary users. Both initial and long-term use must be considered. The actual number of users must be balanced between the cost per user and the adverse effects of having users blocked from the system. The cost per user must be evaluated in relation to the value or importance of the content.

### **2.2.5 LICENSING**

Licenses must be carefully reviewed to ensure that the library maintains fair use rights for its users and that the resources is easily accessible to all users with minimal monitoring or tracking requirements. The contract should include clearly written clauses on the following;

- Authorized users.
- Remote access.
- User authentication – through password, IP, or other methods.

- Fair use rights for library services, including ILLs, document delivery etc.
- Fair use rights for clients accessing the content.
- Protection of privacy if tracking or monitoring systems are used.
- Vendor and organizational liabilities.
- Termination of the contract – when, why and how.

### **2.2.6 SOFTWARE REQUIREMENTS**

Most resources should be self-contained and require no special client or application software. If additional software is needed, it should be standard application software, such as a web browser, that is readily available to users. Special software required on each user's desktop must be evaluated in terms of ease of use, installation and maintenance. Required plug-in applications should be reviewed. A final consideration is whether the software behind the resource can be modified to brand the site.

### **2.2.7 TRAINING AND EDUCATION SUPPORT**

Handouts, manuals and other instructional information should be reviewed. The availability of online tutorials or help screens should be determined. An estimate of the amount of time to learn and teach the system should be made. The need to publicize the resources should also be discussed.

## **3. TYPES OF DATABASES**

1. Bibliographic Databases
2. Full-Text Databases
3. Directory Databases

### **3.1 BIBLIOGRAPHIC DATABASES:**

- Ability to restrict by geography, language, subject coverage.
- Indexing from top to bottom of subject hierarchy.
- Treatment (e.g., policy, review, theoretical).
- Links to related records.
- Exact author and title as well as equivalents.
- Journals and sources spelled out in full with no abbreviations.
- Fully searchable author affiliations, including complete address.
- All data elements searchable.
- Minimum required fields: author, affiliation, title, source, country of origin, publication date, abstract, unique numbers (registry, contract, etc), indexing.
- Standard format for author entry across databases.
- Hierarchically-organized online thesauri showing data term was introduced or replace (with cross references) and
- Online and manual look-up tables for chemical codes, etc.

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**3.2 FULL-TEXT DATABASES** – should have these special needs;

- Fully-searchable records, with field searching possible as well.
- Low-cost browsing format should include document length.
- On/off toggles for equivalencies, synonyms, etc.
- Comprehensive coverage at the source level.
- Subject-oriented files should include the major publications in the field and
- Quick loads, with currency equivalent to that of print sources.

**3.3 DIRECTORY DATABASES** – come in many forms like company, product, association, biographical etc. A directory file is used like a reference book. It should

- Include basic contact/address information regardless of directory type.
- Hierarchical geographic searching.
- Indicate source and data of information.
- Company financials should specify units of currency.
- Links among parent companies and subsidiaries.
- For product directories, include price, product description and/or evaluation, purchasing contact.
- Error correction protocols to ensure accurate downloads of numeric data and
- Mailing label output where appropriate.

## **4. DATABASE QUALITY CRITERIA**

The Southern California online User Group (SCOUG) came up with ten headings or criteria by which databases should be judged; they do make a useful guide. The headings and details are:

1. Consistency
2. Coverage/Scope
3. Timeliness
4. Accuracy/Error rate
5. Accessibility/Ease of Use
6. Integration
7. Output
8. Documentation
9. Customer Support and Training
10. Value-to-Cost Ratio

### **4.1 Consistency**

This is interpreted to mean the extent to which records within a database follow the rules with regard to field assignments, field tag and other data elements as well as indexing and editorial decisions.

### **4.2 Coverage/scope**

- How well does the database cover its subject area(s)? Is it the “authoritative” file in its discipline?

- Are periodicals indexed cover to cover? If not, is the producer's policy on inclusions and exclusions clearly stated?
- Are there any serious gaps or misinterpretations?

#### **4.3 Timeliness**

- How often is the file updated? How current is the material in each update?
- Does one type of publication have priority over others? If so, is this documented?
- Are time-sensitive sources available in near real-time?
- Does the load cycle vary from system to system, so that one version of a database is consistently more or less timely than another?

#### **4.4 Accuracy/Error rate**

- What data sources are used? How current and complete are they?
- Is there a prevalence of typographical errors, incomplete records or other dirty data? What percentage of errors in critical fields? What is the error rate per update?
- What quality control procedure does the producer employ?
- Are faulty records identified and/or removed and corrected?
- Are corrections in the source material or print equivalent incorporated in the database? If so, how promptly?
- Are searchers compensated for unusable information?

#### **4.5 Accessibility/Ease of Use**

This category covers both accesses to online services and at the database level, access to the information itself.

- Does the system require special software or dedicated hardware?
- Can the user sign up online or must written contracts be negotiated first?
- Is the database accessible through gateways as well as directly?
- Does the system support full and variable proximity searching?
- Is there a mechanism for searching literals and stop words?
- Can terms be plucked from an online thesaurus?
- Can a search strategy be saved and re-used in another database?
- Is there a multilingual thesaurus with an automatic synonym option?
- How deeply and flexibly are the records indexed? What kind of subject indexing is used?
- Which data elements are searchable?

#### **4.6 Integration**

- Does the overall database structure resemble that of other files of the same type that are likely to be searched with it?
- Do field and output format tags match those used in comparable databases on the same system?
- Can multiple files be searched together?
- Does the system support duplicate detection and removal?

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- Can one link from textual records to related information in external, perhaps multimedia sources?
- Can one search for a journal or other source by name, without knowing or specifying the data base that carried it?

### **4.7 Output**

- Can the user define custom formats? Can pages/portions of a document be printed selectively?
- Can search results be batch-printed and sent by mail, e-mail, diskette or fax?
- Can search output be downloaded into spreadsheets or database management programs?
- Is downloading possible with the correct formatting?
- Does the system support data compression? Error checking?
- What is the highest baud rate that the system supports?
- Are tables and graphic material included, or just referenced?

### **4.8 Documentation**

- Is both print and online documentation timely, accurate and readable? Is it available free or at nominal cost?
- Is a print thesaurus available?
- Are there regular mailings of newsletters, search aids and other support material?
- At the source level, does database documentation outline editorial policies with regard to coverage dates, currency, inclusions and exclusions?

### **4.9 Customer Support and Training**

- Can customer support be reached via e-mail and is responsive?
- What kind of training is available, both basic and advanced?
- Is training free or reasonably priced?
- Are there computer-based or video tutorials, or other forms of self-paced instruction?
- Are changes made to database without warning/documentation for users?

### **4.10 Value-to-Cost Ratio**

- Do general system characteristics like speed and performance, pricing structures and display options support efficient, cost-effective searching?
- Is there at least one free or inexpensive default format? For documents, does this format include title and publication year? In hybrid files, does it include a full-text indicator?
- Is a KWIC display supported?
- Are display charges for various formats consistent with other databases?
- Does it cost about the same to print offline as it does to print online?
- Can search results be sorted or relevance ranked?
- Is cost accounting available at any point during a search session?
- Are there up-front subscription fees, monthly maintenance costs or minimum usage charges?

## **CONCLUSION**

The quality criteria for evaluating the databases are comprehensiveness, content, affordability, accessibility, and credibility and purpose. Credibility of the database is based on the authority, reputation of the databases producer, vendor, organization, expert behind the database. Purpose of the database is based on its objectives and intended users. Thus one has to carefully select the e-resource what is required for their library users and then evaluate the same before purchasing. LIS professionals should take lead in evaluating the resources that are required for their users.

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