

Indexing and Abstracting Services

OCLC

The Online Computer Library Center, Inc. (OCLC) is a nonprofit, membership, computer library service and research organization dedicated to the public purposes of furthering access to the world's information and reducing information costs. It was founded in 1967 as the Ohio College Library Center. OCLC and its member libraries cooperatively produce and maintain WorldCat, the largest online public access catalog (OPAC) in the world.

History

OCLC began in 1967, as the Ohio College Library Center, through a collaboration of Ohio university presidents, vice presidents, and library directors who wanted to create a cooperative, computerized network for Ohio libraries. The group first met on July 5, 1967 on the campus of the Ohio State University to sign the articles of incorporation for the nonprofit organization.

Services

OCLC provides bibliographic, abstract and full-text information to anyone. OCLC and its member libraries cooperatively produce and maintain WorldCat—the OCLC Online Union Catalog, the largest online public access catalog (OPAC) in the world. WorldCat has holding records from public and private libraries worldwide. The Open WorldCat program, launched in late 2003, exposed a subset of WorldCat records to Web users via popular Internet search, bibliographic, and bookselling sites; Open WorldCat later morphed into WorldCat.org. In October 2005, the OCLC technical staff began a wiki project, WikiD, allowing readers to add commentary and structured-field information associated with any WorldCat record. WikiD was later phased out.

The Online Computer Library Center acquired the trademark and copyrights associated with the Dewey Decimal Classification System when it bought Forest Press in 1988. A

browser for books with their Dewey Decimal Classifications was available until July 2013; it was replaced by the OCLC Classify Service.

Until August 2009, when it was sold to Backstage Library Works, OCLC owned a preservation microfilm and digitization operation called the OCLC Preservation Service Center, with its principal office in Bethlehem, Pennsylvania, U.S.

The reference management service QuestionPoint provides libraries with tools to communicate with users. This around-the-clock reference service is provided by a cooperative of participating global libraries.

OCLC produced catalog cards for member libraries beginning in 1971 with its shared online catalog; the company printed its last catalog cards on October 1, 2015.

Software

OCLC commercially sells software, e.g., CONTENTdm for managing digital collections.

Research

OCLC has been conducting research for the library community for more than 30 years. In accordance with its mission, OCLC makes its research outcomes known through various publications.^[15] These publications, including journal articles, reports, newsletters, and presentations, are available through the organization's website.

- OCLC Publications – Research articles from various journals including Code4Lib Journal, OCLC Research, Reference & User Services Quarterly, College & Research Libraries News, Art Libraries Journal, and National Education Association Newsletter. The most recent publications are displayed first, and all archived resources, starting in 1970, are also available.
- Membership Reports – A number of significant reports on topics ranging from virtual reference in libraries to perceptions about library funding.
- Newsletters – Current and archived newsletters for the library and archive community.

- Presentations – Presentations from both guest speakers and OCLC research from conferences, webcasts, and other events. The presentations are organized into five categories: Conference presentations, Dewey presentations, Distinguished Seminar Series, Guest presentations, and Research staff presentations.
- Online database: WorldCat
- Main article: WorldCat
- OCLC has a database, WorldCat, for cataloging and searching purposes which is used by librarians and the public. Contributions to WorldCat are made via a computer program, Connexion, which was introduced in 2001; the Connexion predecessor, OCLC Passport, was phased out in May 2005.
- WorldCat contains records in MACHine Readable Cataloging (MARC) format contributed by library catalogers worldwide who use OCLC as a cataloging tool. These MARC format records are then downloaded into the libraries' local catalog systems. This allows libraries to find and download records for materials to add to their local catalog without the lengthy process of cataloging each individually.
- As of March 2015, the OCLC database contained over 336M records with 2.2 billion cataloged items, and is the world's largest bibliographic database covering 72,000 libraries. Connexion is available to professional librarians as a computer program or on the web at connexion.oclc.org.
- WorldCat is available to the public for searching via a subscription web-based service called FirstSearch, as well as through the publicly available WorldCat.org.

ERIC

ERIC (Educational Resources Information Center) is the world's most widely used index to educational-related literature. Established in 1966, ERIC is supported by the U.S. Department of Education's Office of Educational Research and Improvement and is administered by the U.S. National Library of Education (NLE).

ERIC is the largest education database in the world-containing over 1.5 million records of journal articles, research reports, curriculum and teaching guides, conference papers, dissertations and theses, and books.

Currently over 650,000 records are from scholarly journals, more than 225,000 records are from reports, conference proceedings, and the like, and reference works in excess of 14,000 records. Many of these records contain links to the ERIC full-text documents, but the user can also access full-text from the publisher when available or use the library's linked full-text resources when available. Additional full text from ProQuest for many of the journals indexed in ERIC is available through ProQuest Education Journals. The bundle of ERIC Plus Text includes the ERIC index and ProQuest Education Journals, and users can link directly from records in an ERIC search to full text from ProQuest Education Journals.

Selection Policy

ERIC indexes education journals, the majority of which are peer-reviewed. Most of these journals are indexed comprehensively - that is, a record for every article in each issue is included in ERIC. Some journals are indexed selectively - that is, only those articles that are education-related are selected for indexing.

In addition to the journal literature, ERIC indexes education-related materials from a variety of sources, including scholarly organizations, professional associations, research centers, policy organizations, university presses, the U.S. Department of Education and other federal agencies, and state and local agencies. Individual contributors submit conference papers, research papers, dissertations, and theses.

As of January 2014, ERIC's Selection Policy reflects four overarching goals:

- Ensure that each resource selected for indexing is education research that is relevant to the ERIC mission.
- Increase the number of peer-reviewed, full-text materials in ERIC.
- Increase the number of full-text materials that are rigorous and relevant although not peer reviewed.
- Limit articles without full text to only those articles that are peer reviewed or are of substantive rigor and relevance.

MEDLINE

MEDLINE (Medical Literature Analysis and Retrieval System Online, or MEDLARS Online) is a bibliographic database of life sciences and biomedical information. It includes bibliographic information for articles from academic journals covering medicine, nursing, pharmacy, dentistry, veterinary medicine, and health care. MEDLINE also covers much of the literature in biology and biochemistry, as well as fields such as molecular evolution.

Compiled by the United States National Library of Medicine (NLM), MEDLINE is freely available on the Internet and searchable via PubMed and NLM's National Center for Biotechnology Information's Entrez system.

History

MEDLARS (Medical Literature Analysis and Retrieval System) is a computerised biomedical bibliographic retrieval system. It was launched by the National Library of Medicine in 1964 and was the first large scale, computer based, retrospective search service available to the general public.

Initial development of MEDLARS

Since 1879, the National Library of Medicine had published *Index Medicus*, a monthly guide to medical articles in thousands of journals. MEDLARS cost \$3 million to develop and at the time of its completion in 1964, no other publicly available, fully operational electronic storage and retrieval system of its magnitude existed. The original computer configuration operated from 1964 until its replacement by MEDLARS II in January 1975.

MEDLARS Online

In late 1971, an online version called MEDLINE ("MEDLARS Online") became available as a way to do online searching of MEDLARS from remote medical libraries. This early system covered 239 journals and boasted that it could support as many as 25 simultaneous online users (remotely logged-in from distant medical libraries) at one time. However, this system remained primarily in the hands of libraries, with researchers

able to submit pre-programmed search tasks to librarians and obtain results on printouts, but rarely able to interact with the NLM computer output in real-time. This situation continued through the beginning of the 1990s and the rise of the World Wide Web.

In 1996, soon after most home computers began automatically bundling efficient web browsers, a free public version of MEDLINE was instigated. This system, called PubMed, was offered to the general online user in June, 1997, when MEDLINE searches via the Web were demonstrated, in a public ceremony, by Vice President Al Gore.

Database

The database contains more than 21.6 million records from 5,639 selected publications covering biomedicine and health from 1950 to the present. Originally the database covered articles starting from 1965, but this has been enhanced, and records as far back as 1950/51 are now available within the main index. The database is freely accessible on the Internet via the PubMed interface and new citations are added Tuesday through Saturday. For citations added during 1995-2003: about 48% are for cited articles published in the U.S., about 88% are published in English, and about 76% have English abstracts written by authors of the articles.

Retrieval

MEDLINE uses Medical Subject Headings (MeSH) for information retrieval. Engines designed to search MEDLINE (such as Entrez and PubMed) generally use a Boolean expression combining MeSH terms, words in abstract and title of the article, author names, date of publication, etc. Entrez and PubMed can also find articles similar to a given one based on a mathematical scoring system that takes into account the similarity of word content of the abstracts and titles of two articles.

Importance

MEDLINE functions as an important resource for biomedical researchers and journal clubs from all over the world. Along with the Cochrane Library and a number of other databases, MEDLINE facilitates evidence-based medicine. Most systematic review articles published presently build on extensive searches of MEDLINE to identify articles that might be useful in the review. MEDLINE influences researchers in their choice of journals in which to publish.

Inclusion of journals

More than 5,500 biomedical journals are indexed in MEDLINE. New journals are not included automatically or immediately. Selection is based on the recommendations of a panel, the Literature Selection Technical Review Committee, based on scientific scope and quality of a journal.^[9] The Journals Database (one of the Entrez databases) contains information, such as its name abbreviation and publisher, about all journals included in Entrez, including PubMed.

Usage

PubMed usage has been on the rise since 2008. In 2011, PubMed/MEDLINE was searched 1.8 billion times, up from 1.6 billion searches in the previous year.

A service such as MEDLINE strives to balance usability with power and comprehensiveness. In keeping with the fact that MEDLINE's primary user community is professionals (medical scientists, health care providers), searching MEDLINE effectively is a learned skill; untrained users are sometimes frustrated with the large numbers of articles returned by simple searches. Counterintuitively, a search that returns thousands of articles is not guaranteed to be comprehensive. Unlike using a typical Internet search engine, PubMed searching of MEDLINE requires a little investment of time. Using the MeSH database to define the subject of interest is one of the most useful ways to improve the quality of a search. Using MeSH terms in conjunction with limits (such as publication date or publication type), qualifiers (such as adverse effects or prevention and control), and text-word searching is another. Finding one article on the subject and

clicking on the "Related Articles" link to get a collection of similarly classified articles can expand a search that otherwise yields few results.

For lay users who are trying to learn about health and medicine topics, the NIH offers MedlinePlus; thus, although such users are still free to search and read the medical literature themselves (via PubMed), they also have some help with curating it into something comprehensible and practically applicable for patients and family members.

Dialog

Dialog is an online information service owned by ProQuest, who acquired it from Thomson Reuters in mid-2008. Dialog was one of the predecessors of the World Wide Web as a provider of information, though not in form. The earliest form of the Dialog system was completed in 1966 under the direction of Roger K. Summit. According to its literature, it was "the world's first online information retrieval system to be used globally with materially significant databases". In the 1980s, a low-priced dial-up version of a subset of Dialog was marketed to individual users as *Knowledge Index*. This subset included INSPEC, MathSciNet, over 200 other bibliographic and reference databases, as well as third-party retrieval vendors who would go to physical libraries to copy materials for a fee and send it to the service subscriber.

EBSCO

EBSCO Information Services, headquartered in Ipswich, Massachusetts, is a division of EBSCO Industries Inc., the third largest private company in Birmingham, Alabama, with annual sales of nearly \$2 billion according to the BBJ's 2013 Book of Lists. EBSCO offers library resources to customers in academic, medical, K–12, public library, law, corporate, and government markets. Its products include EBSCONET, a complete e-resource management system, and EBSCOhost, which supplies a fee-based online research service with 375 full-text databases, a collection of 600,000-plus ebooks, subject indexes, point-of-care medical references, and an array of historical digital archives. In 2010, EBSCO introduced its EBSCO Discovery Service (EDS) to institutions, which allows searches of a portfolio of journals and magazines.

History

EBSCO Information Services is a division of EBSCO Industries Inc., a family owned company since 1944. "EBSCO" is an acronym for Elton B. Stephens Co. According to *Forbes Magazine*, EBSCO is one of the largest privately held companies in Alabama and one of the top 200 in the United States, based on revenues and employee numbers. Sales surpassed \$1 billion in 1997 and exceeded \$2 billion in 2006.

EBSCO Industries is a diverse company which includes over 40 businesses. EBSCO Publishing was established in 1984 as a print publication called *Popular Magazine Review*, featuring article abstracts from more than 300 magazines. In 1987 the company was purchased by EBSCO Industries and its name was changed to EBSCO Publishing. It employed around 750 people by 2007. In 2003 it acquired Whitston Publishing, another database provider. In 2010 EBSCO purchased NetLibrary and in 2011, EBSCO Publishing took over H. W. Wilson Company. It merged with EBSCO Information Services on July 1, 2013. The merged business operates as EBSCO Information Services.

Products

Databases: EBSCO provides a range of library database services. Many of the databases, such as MEDLINE and EconLit, are licensed from content vendors. Others, such as Academic Search, America: History & Life, Art Index, Art Abstracts, Art Full Text, Clinical Reference Systems, Criminal Justice Abstracts, Education Abstracts, Environment Complete, Health Source, Historical Abstracts, History Reference Center, MasterFILE, NetLibrary, Primary Search, Professional Development Collection, and USP DI are compiled by EBSCO itself. **Discovery:** This product is used to create a unified, customized index of an institution's information resources, and a means of accessing all the content from a single search box. The system works by harvesting metadata from both internal and external sources, and then creating a preindexed service. **eBooks:** EBSCO provides ebooks and audiobooks across a wide range of subject matter.

Reference

- Croft, W.B., Metzler, D., and Strohman, T. (2009). Information retrieval in practice. New Jersey: Pearson Education.
- Manning, C.D., Raghavan, P., and Schutze, H. (2008). Introduction to information retrieval. New York: Cambridge University Press.
- Grossman, D.A. and Frieder, O. (2004). Information retrieval: algorithms and heuristics. Dordrecht: Springer.
- Chowdhury, G.G. (2010). Introduction to modern information retrieval. 3rd edition. London: Facet Publishing.