

# Education and Training for On-Line Searching: A Bibliography

This annotated bibliography is intended to be used by searchers, educators, library administrators, and other reference department staff who must plan or provide for the training and continuing education of on-line searchers. It was compiled for the MARS Committee on the Education and Training of Search Analysts.

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Bellardo, Trudi; Kennedy, Gail; and Tremoulet, Gretchen. "On-Line Bibliographic System Instruction," *Journal of Education for Librarianship* 19:21-31 (Summer 1978).

At the University of Kentucky three instructors who were practicing librarians taught a three-part course in the College of Library Science, utilizing library space, equipment and materials. The five-week sessions were devoted to OCLC, MEDLINE, and Lockheed/DIALOG. Problems related to class size, scheduling, theft of equipment, etc. are discussed, as well as the students' overall reactions to the course.

Berk, Robert A., and Davidson, Rebecca W. "MEDLINE Training within the Library School Curriculum: Quality Control and Future Trends," *Bulletin of the Medical Library Association* 66:302-8 (July 1978).

A survey of schools of library science assessed the current status of MEDLINE training. The authors gathered information on several variables that were believed to be measures of the quality of instruction. These included the course objectives; the instructor's background and knowledge of the system; use of resource personnel; course structure, including instructional time devoted to MEDLINE

and amount of hands-on experience with the system; support tools utilized; search questions; and feedback from students, employers, and MEDLINE users.

Borgman, C., and Trapani, J. "Novice User Training on PIRETS," in American Society for Information Science, Thirty-eighth Annual Meeting, *Proceedings*, V.12, p.149-50. Washington, D.C.: The Society, 1975.

Describes a two-hour training program to allow searching without an intermediary.

Bourne, Charles P., and Anderson, Barbara E. "Observation on the Use of the Lockheed DIALOG System for Laboratory Work in a Fall 1975 Course on Computer-based Reference Service at the UCB School of Librarianship" (unpublished paper). Berkeley: Institute of Library Research, University of California, Jan. 1976.

A report on Bourne and Anderson's pioneer project to introduce training on a commercial retrieval system (DIALOG) into the library science curriculum at Berkeley.

Caruso, D. E. "Tutorial Programs for Operation of On-Line Retrieval Sys-

tems," *Journal of Chemical Documentation* 10:98-105 (May 1970).

Describes a self-teaching system utilizing CAI programs that was developed at the University of Pittsburgh Chemical Information Center. The objective was to train the local chemical community to develop search strategies for computerized retrieval systems without an intermediary.

Caruso, Elaine. "Hands On On-Line in Multi-System Multi-Data Base Trainer," *Library Science with a Slant to Documentation* 15:83-88 (June 1978).

Describes the development of training packages to users for ORBIT and DIALOG retrieval systems. The training materials consisted of printed text, computer-assisted learning and practice sequences, emulation of the operational search services, and searchable files of multiple data bases.

———. "Teaching with and about Interactive Computer-based Document Retrieval," in Alberta Berton, ed., *Proceedings of the Seventh Annual National Colloquium on Information Retrieval*, p.416-27. Philadelphia: College of Physicians of Philadelphia Medical Documentation Service, 1970.

Describes an early effort at the University of Pittsburgh to introduce a course in computer-based information retrieval into the library and information science curriculum.

———. "Hands On Online: Bringing It Home," *ONLINE* 2:251-68 (Sept. 1978).

Discusses the problem a user faces in accessing the contents of machine-stored bibliographic data bases and evaluates the training methods used to overcome these problems. A training program called the Hands On On-Line Multisystem Multi-database Trainer is introduced and described.

Caruso, Elaine, and Griffiths, John. "A TRAINER for Online System," *ONLINE* 1:28-34 (Oct. 1977).

An on-line training package developed at the University of Pittsburgh provides programmed instruction and extensive

practice for potential users of Lockheed/DIALOG and SDC/ORBIT without the expense of searching with the full-size systems on a commercial basis. The TRAINER contains a system of programs that emulate the large-scale systems.

Christensen, John E. "Learning to Use LEXIS: Policies and Procedures, Training Exercises, Resource Materials." Austin: University of Texas, Tarlton Law Library, June 1977. 43p.

This is a self-paced training manual workbook designed to assist law students in developing skills needed for effective use of LEXIS. It includes (1) instructions and training exercises; using the LEXIS simulator and flip chart to learn the keyboard and simple search strategies; watching videotape lecture demonstration modules of actual LEXIS use; and on-line practice; (2) a list of skills affecting effective use; (3) rules and policies regarding use at Tarlton; and (4) resource materials—a training checklist, a bibliography, and current contents of LEXIS libraries.

Egeland, Janet. "The Importance of User Education and Training in a Multi-Database Online Information Network," in American Society for Information Science, Thirty-seventh Annual Meeting, *Proceedings*, V.11, p.137-40. Washington, D.C.: The Society, 1974.

Describes the training efforts of the SUNY Biomedical Communication Network. It was concluded that the most essential aspect of the training was instruction in the most effective search formulations or strategies applicable to each specific data base. The paper emphasizes the need for user awareness of the differences in the indexing policies and vocabulary structures for each data base.

———. "User-Interaction in the State University of New York (SUNY) Biomedical Communication Network," in *Interactive Bibliographic Search: The User/Computer Interface*. Montvale, N.Y.: AFIPS, 1971.

Includes a complete listing of a programmed series of instructions available to aid users.

Eisenberg, Laura J., and others. "MED-LEARN: A Computer-Assisted Instruction (CAI) Program for MEDLARS," *Bulletin of the Medical Library Association* 66:6-13 (Jan. 1978).

MEDLEARN, a computer-assisted instruction program available since October 1976, provides on-line training for MEDLINE. It combines tutorial dialogue, drill and practice, testing, and simulation. The program was designed in three tracks oriented to basic methods, advanced techniques, and new developments.

Elam, Phillip G. "On-Line Training: Brief, Simple, Direct," *INFOSYSTEMS* 25:65+ (Nov. 1978).

Considers four methods for teaching users how to use on-line systems. Discusses the use of printed instructional guides, personal instruction by a trained instructor, audiovisual presentations, and instruction provided on-line at the terminal itself.

Faibisoff, Sylvia, and Bennett, John L. "Online Reference Retrieval Training for Effective Use," *Bulletin of the American Society for Information Science* 3, no.6:35 (1977).

Report of the one-day workshop on on-line reference retrieval training held prior to the sixth ASIS Mid-Year Meeting at Syracuse University, May 1977.

Haggerty, Thomas M. "Education for On-Line Users," *Bulletin of the American Society for Information Science* 3, no.6:20-21 (1977).

Describes the work of the Washington Area On-Line Users Group to provide training and education for its members.

Hardin, Mary, and Nitecki, Danuta A. "A New Breed of Online Specialty: The Remote Profiler (User Training)," *ON-LINE* 2:31-38 (July 1978).

The authors conducted a one-day training seminar for fourteen remote profilers, all of whom were novices to the field of automated information retrieval services. They did not attempt to teach the skills of actual on-line searching but rather focused on skills related to communicating to patrons the advantages of an on-line

search and eliciting from patrons the information needed for the on-line searcher to interact with the computer.

Harmon, G. "Information Science Education and Training," in M. Williams, ed., *Annual Review of Information Science and Technology* V.11, p.347-80. Washington, D.C.: American Society for Information Science, 1976.

Harter, Stephen P. "An Assessment of Instruction Provided by Library Schools in On-Line Searching," *Information Processing & Management* 15, no.2:71-75 (1979).

The results of a survey of library schools indicate that instruction provided in on-line searching is widespread and growing but that there is a great diversity among library schools in terms of the goals and objectives of the instruction provided. The article also describes the University of South Florida's course entitled Automated Information Sources and Services.

———. "Instruction Provided by Library Schools in Machine-Readable Bibliographic Data Bases." American Society for Information Science, Annual Meeting, *Proceedings* 14:14 and microfiche in pocket. White Plains, N.Y.: Knowledge Industry Publications, for The Society, 1977.

Reports the results of a state-of-the-art survey of the library education programs accredited by ALA in order to compile a body of data reflecting the extent to which library schools currently provide access to machine-readable bibliographic data bases.

Heer, Phillipp R., and Foyle, James K. "Multi-Media Education for On-Line Retrieval," in American Society for Information Science, Third Mid-Year Meeting, *Proceedings*. Washington, D.C.: The Society, 1974.

Describes training packages for the University of Denver Graduate School of Librarianship that use multimedia presentations, including computer-assisted instruction (CAI), slide-sound, transparency, and videotape audiovisual instruc-

tion, lecture and discussion, practice question negotiation, and hands-on use of the on-line retrieval system.

Houghton, Bernard, and Convey, John. *On-Line Information Retrieval Systems; An Introductory Manual to Principles and Practice*. Hamden, Conn.: Linnet Books, 1977.

Includes general techniques and procedures of on-line searching plus sections with details from DIALOG, ORBIT, MEDLINE, and others (not BRS).

Jahoda, Gerald. "Education for Information Science," in C. Cuadra, ed., *Annual Review of Information Science and Technology* V.8, p.321-44. Washington, D.C.: American Society for Information Science, 1973.

Covers curriculum, teaching methods, materials, etc., for graduate-level programs in information science offered in library schools and elsewhere.

Kent, Allen, and Galvin, Thomas. *The On-Line Revolution in Libraries: Proceedings of the 1977 Conference in Pittsburgh, Pennsylvania*. New York: M. Dekker, 1978.

Includes several papers on training of librarians and users: E. Caruso, "Training and Retraining of Librarians and Users"; E. E. Duncan, "Who Should Be Trained"; A. A. Martin, "Training and Retraining of Librarians and Users: Reaction"; S. K. Martin, "Training for the Whole Online Revolution."

Knapp, Sara D., and Gavryk, Jacquelyn A. "Computer Based Reference Service—A Course Taught by Practitioners," *ONLINE* 2:65-76 (April 1978).

The School of Library and Information Science at the State University of New York at Albany used practicing librarians and library terminals to teach a course, Computer-Based Reference Services. The students learned about one search system (BRS) and one data base (ERIC), as well as Boolean logic and search formulation, role and function of the search analyst, management of services, costs, charging, publicity, institutional context, and future needs and possibilities.

Lancaster, F. Wilfrid, and Fayen, E. *Information Retrieval Online*. Los Angeles: Wiley, 1973.

Includes a chapter on instruction and training of users.

McCarn, Davis. "Online Systems—Techniques and Services," in M. Williams, ed., *Annual Review of Information Science and Technology*, V.13, p.85-124. Washington, D.C.: American Society for Information Science, 1978.

Includes a short summary of recent reports on training.

Markey, Karen, and Atherton, Pauline. *ONTAP: Online Training and Practice Manual for ERIC Data Base Searchers*. Syracuse, N.Y.: ERIC Clearinghouse on Information Resources, June 1978.

A manual for use with the DIALOG services' ONTAP (Online Training and Practice). It is a self-improvement aid, designed for experienced searchers, to be used in conjunction with the ONTAP file.

Marron, B., and Fife, D. "Online Systems—Techniques and Services," in M. Williams, ed., *Annual Review of Information Science and Technology*, V.11:163-210. Washington, D.C.: American Society for Information Science, 1976.

Briefly reviews several reports on user training and also the role of the intermediary.

Meadow, Charles, and Epstein, B. E. "Individualized Instruction for Data Access," in *First International On-Line Information Meeting, 13-15 December 1977*, p.179-94. Oxford: Learned Information (Europe) Ltd., 1978.

Meadow, Charles; Toliver, D. E.; and Edelman, J. V. "A Technique for Machine Assistance to Online Searchers," in American Society for Information Science, Annual Meeting, *Proceedings*, V.15, p.222-25. White Plains, N.Y.: Knowledge Industry Publications, for The Society, 1978.

Describes project sponsored by the National Science Foundation to develop a system for providing direct aid without human intervention to inexperienced

searchers; will teach how to search, assist during actual search, allow study of user performance.

Mignon, Edmond. "Emerging Perspectives on the Teaching of Online Searching as a Professional Specialization," in American Society for Information Science, Annual Meeting, *Proceedings*, V.15, p.226-28. White Plains, N.Y.: Knowledge Industry Publications, for The Society, 1978.

Summarizes two position papers resulting from an institute on new techniques in the teaching of on-line searching, held in 1978 for library school faculty.

Moghdam, Dineh. "User Training for On-Line Information Retrieval Systems," *Journal of the American Society for Information Science* 26:184-88 (May-June 1975).

The use of computer-assisted instruction in conjunction with the on-line information retrieval system is a promising form of instruction in that the medium itself, as well as the message, may be used to acquaint the novice searcher with an interactive user/system interface.

Pratt, Gordon, and Vickery, Alina. "The Development of Multi-Media Teaching Aids for Users of Computer-based Information Retrieval Systems," *Program: News of Computers in Libraries* (England) 11:10-15 (Jan. 1977).

Describes the use of a modified cassette recorder to present information and instruction to intermediaries and users of on-line information retrieval systems using three mediums. The cassette recorder coordinates (1) computer signals recorded and displayed upon a visual display unit, (2) audio-signals, that is, voice commentary, relayed through a loudspeaker, and (3) 35mm slides displayed on an overhead screen.

Rees, Alan M.; Holian, Lydia; and Schaap, Ann. "An Experiment in Teaching MEDLINE," *Bulletin of the Medical Library Association* 64:196-202 (April 1976).

The design and implementation of an experimental MEDLINE module at Case Western Reserve University School of Li-

brary Science is described. The module places MEDLINE within the context of multiple data bases and networking operations and is embedded in a course in health science communication. The module consists of eight weeks of lectures, demonstrations, videotapes, and exercises on terminals.

Sewell, Winifred. "Use of MEDLINE in a Medical Literature Course," *Journal of Education for Librarianship* 15:34-40 (Summer 1974).

At the University of Maryland, two to three hours of instruction on MEDLINE in a medical literature course enabled the students to use MEDLINE independently. They learned the value of an on-line system and attained skill and confidence in using it, as well as achieving a quick understanding of many aspects of the basic system, MEDLARS.

Tedd, Lucy A., and Keen, E. Michael. "Methods of Teaching On-line Bibliographic Searching: Experience at the College of Librarianship Wales," *Information Processing & Management* 14, no.6:453-63 (1978).

Discusses aspects of the design of courses in on-line searching. Compares the relative costs, in terms of system costs and staff time, of various methods of demonstration. The methods of demonstration involve the playing back of recorded searches on videotape, audio cassettes, and digital cassettes as well as live demonstrations.

Triolo, Victor A., and Regazzi, John J. "Continuing Education in On-Line Searching: An Instructional Module for Special Librarians," *Special Libraries* 69:189-200 (May/June 1978).

Describes a two-day institute in data base searching for special librarians held at Southern Connecticut State College, Division of Library Science and Instructional Technology. It was designed for those with a minimal background in on-line information retrieval.

Unruh, Betty. "User Education—The Channel for Communication," in *2d International Online Information Meeting, London, 5-7 December 1978*.

Describes Data Courier's user education program and how it provides interaction between data base producer and user that has resulted in several activities including the publication of a series of user aids.

Vickery, B. C. "The Experimental Use of On-Line Services in Schools of Librarianship and Information Science," in *1st International On-Line Information Meeting, London, 13-15 December 1977*, p.195-201. Oxford: Learned Information, 1978.

Summarizes the research by the British Library Research and Development Department that assessed practical instruction in on-line searching in ten U.K. library schools. Describes the teaching and assessment methods used. Among particular teaching problems and methods considered are: ensuring on-line access at the time a group or class search is scheduled; costs; teaching aids; equipment; search queries; and staff time.

Wax, David. *A Handbook for the Introduction of On-Line Bibliographic Search Services into Academic Libraries*. Washington, D.C.: Association of Research Libraries, 1976.

Includes sections on training.

Westmoreland, Guy T. "Training Librarians to Conduct On-Line Literature

Searches," in Peter G. Watson, ed., *On-Line Bibliographic Services; Where We Are; Where We're Going*, p.54-59. Chicago: American Library Association, Reference and Adult Services Division, April 1977.

An overview of training programs, with the focus on introductory retrieval system seminars or workshops; adequate practice time; training on specific data bases; and refresher training and updating.

Williams, Martha E. "Education and Training for On-Line Use of Databases," *Journal of Library Automation* 10:320-34 (Dec. 1977).

Discusses vehicles for education and training, tools and techniques for promotion, and details the information requirements of the processors, service managers, searchers, and end users of on-line data bases.

Williams, Martha, and Brandhorst, Ted. "Online Search Service: Education and Training," *Bulletin of the American Society for Information Science* 3, no.6:33-34 (1977).

Overview of the needs and opportunities in training, including what the searcher needs to know to be effective. ■■