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ABSTRACT

This document lists sources useful for academic reference and instruction librarians who are concerned with assisting and teaching novice or non-professional end-user searchers. The bibliography is organized in two lists: complete bibliographic citations and subject listing of references. The types of sources listed include journal articles, books, conference proceedings, doctoral dissertations, and ERIC documents. The subject listing of references is organized into four parts. Part I, "Information Seeking Behavior," covers information needs; the research process; the search process; and retrieval performance. Part II, "Psychological Aspects of Information Seeking Behavior," includes psychological theories and research methods; affective factors and anxiety; cognitive factors; user needs and user studies; user-intermediary interaction; human-computer interaction; and individual differences and searching styles. Part III, "Characteristics of Searchers," covers academic background and knowledge of subject; searching experience; level of education of searchers; and other characteristics. Finally, Part IV, "User Education for Information Seeking and Retrieving," includes implications of information technology for user education and reference service; the role of academic librarians; information literacy; critical thinking; learning theories and learning styles; cognitive models and mental models; and instructional objectives, teaching methods, and user education program descriptions. (JLB)

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**INFORMATION SEEKING BEHAVIOR**  
**AND**  
**USER EDUCATION**  
**IN**  
**ACADEMIC LIBRARIES:**  
**RESEARCH, THEORY, AND PRACTICE**  
**A Selected List of Information Sources**

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## INTRODUCTION

The sources in this list are useful for academic reference and instruction librarians who are concerned with assisting and teaching novice or non-professional end-user searchers. The sources apply to many types of access to information and methods of information retrieval, such as online public access catalogs (OPACs), online databases, CD-ROM databases, bibliographic databases, factual-information databases, full-text databases, and remote access. Manual searching of print sources including periodical indexes, card catalogs, books and government documents is also considered. The topics covered include information needs, the research process, search stages, search vocabulary, search strategy, search outcome, evaluating and selecting relevant information sources, affective and cognitive aspects of information seeking behavior, user-intermediary interaction, human-computer interaction, individual differences, and characteristics of searchers. Topics concerning user education include implications of information technology for user education, the educational role of academic librarians, learning theories, cognitive models, instructional objectives, teaching methods, and the issues of critical thinking and information literacy as they apply to user education in the information seeking and retrieval process.

The types of information sources listed include journal articles, books, conference proceedings, doctoral dissertations, and ERIC documents. Bibliographies, literature reviews, project descriptions, research reports, and explanations of theories and models are all included. Authors include professionals from the fields of computer science, education, information science, library science, and psychology. Most of the information sources were published from 1986 to 1993, although some significant items published before 1986 have been included. The main list of "COMPLETE BIBLIOGRAPHIC CITATIONS" is arranged alphabetically by the names of the authors or editors of the publications. Subject headings which describe the information sources are listed in the "TOPICAL OUTLINE." In the "SUBJECT LISTING OF REFERENCES" brief citations which contain the authors' names, publication dates, and titles are listed for each subject heading from the "TOPICAL OUTLINE." More information for each of the brief references can be found in the list of "COMPLETE BIBLIOGRAPHIC CITATIONS." Abstracts of many of the sources in the list can be found by searching the ERIC database.

## TOPICAL OUTLINE

- I. Information Seeking Behavior
  - A. Information Needs
  - B. The Research Process
  - C. The Search Process
    - 1. Search Stages
    - 2. Database Selection
    - 3. Search Terms (Controlled Vocabulary, Free-Text, Natural Language)
    - 4. Search Strategy, Retrieval Techniques
    - 5. Evaluating Relevance, Selecting Sources, Information Overload
  - D. Retrieval Performance, Search Outcome  
(Success, Failure, User Satisfaction, User Problems)
  
- II. Psychological Aspects of Information Seeking Behavior
  - A. Psychological Theories and Research Methods  
Used in Information Seeking Behavior Studies
  - B. Affective Factors, Anxiety
  - C. Cognitive Factors
  - D. User Needs, User Studies
  - E. User-Intermediary Interaction
  - F. Human-Computer Interaction
  - G. Individual Differences, Searching Styles

## TOPICAL OUTLINE

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### III. Characteristics of Searchers

#### A. Academic Background, Knowledge of Subject

1. More than One Academic Discipline Considered
2. Science Information
3. Social Science Information
4. Humanities Information
5. Medical Information

#### B. Searching Experience

(Novices, Experts, End-Users, Search Intermediaries)

#### C. Level of Education of Searchers

(Faculty, Graduate Students, Undergraduate Students, Practitioners, Professionals)

#### D. Other Characteristics of Users or More than One Characteristic Considered

### IV. User Education for Information Seeking and Retrieving

#### A. Implications of Information Technology for User Education and Reference Service

#### B. The Role of Academic Librarians (Educators, Intermediaries)

#### C. Information Literacy

#### D. Critical Thinking

#### E. Learning Theories, Learning Styles

#### F. Cognitive Models, Mental Models

#### G. Instructional Objectives, Teaching Methods, User Education Program Descriptions

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- Allen, Bryce. "Cognitive Differences in End User Searching of a CD-ROM Index." In SIGIR '92: Proceedings of the Fifteenth Annual International ACM SIGIR Conference on Research and Development in Information Retrieval in Copenhagen, Denmark 21-24 June 1992, edited by Nicholas Belkin, Peter Ingwersen, and Annelise Mark Pejtersen, 298-309. New York, NY: Association for Computing Machinery, 1992.
- \_\_\_\_\_. "Cognitive Research in Information Science: Implications for Design." Annual Review of Information Science and Technology (ARIST) 26 (1991): 3-37.
- \_\_\_\_\_. "Effects of Academic Background on Statements of Information Need." Library Quarterly 60(2) (April 1990): 120-138.
- \_\_\_\_\_. "Logical Reasoning and Retrieval Performance." Library and Information Science Research 15(1) (Winter 1993): 93-105.
- \_\_\_\_\_. "Text Structures and the User-Intermediary Interaction." RQ 27(4) (Summer 1988): 535-541.
- \_\_\_\_\_. "Topic Knowledge and Online Catalog Search Formulation." Library Quarterly 61(2) (April 1991): 188-213.
- Allen, Bryce and Gillian Allen. "Cognitive Abilities of Academic Librarians and Their Patrons." College and Research Libraries 54(1) (January 1993): 67-73.
- Allen, Gillian. "CD-ROM Training: What Do the Patrons Want?" RQ 30(1) (Fall 1990): 88-93.
- \_\_\_\_\_. "Database Selection by Patrons Using CD-ROM." College and Research Libraries 51(1) (January 1990): 69-75.
- \_\_\_\_\_. "Patron Response to Bibliographic Databases on CD-ROM." RQ 29(1) (Fall 1989): 103-110.
- Ankeny, Melvon L. "Evaluating End-User Services: Success or Satisfaction?" The Journal of Academic Librarianship 16(6) (January 1991): 352-356.

- Association of College and Research Libraries. "Model Statement of Objectives for Academic Bibliographic Instruction: Draft Revision." College & Research Libraries News 48(5) (May 1987): 256-261.
- Baker, Betsy. "A Conceptual Framework for Teaching Online Catalog Use." The Journal of Academic Librarianship 12(2) (May 1986): 90-96.
- Baker, Betsy and Beth Sandore. "Effective Information Retrieval: A Model for Teaching and Learning." In Convergence: Proceedings of the Second National Conference of the Library and Information Technology Association Held in Boston, Massachusetts 2-6 October 1988, edited by Michael Gorman, 57-66. Chicago: American Library Association, 1990.
- Baker, Betsy and Mary Ellen Litzinger, eds. The Evolving Educational Mission of the Library. Chicago: ACRL, American Library Association, 1992.
- Baker, Betsy, Mary M. Huston, and Maureen Pastine. "Making Connections: Teaching Information Retrieval." Library Trends 39(3) (Winter 1991): 210-222.
- Balaraman, Kamala. "End-User Studies in CD-ROM Environment: Work in Progress." ASIS '91: Proceedings of the ASIS Annual Meeting 28 (1991): 283-294.
- Barbuto, Domenica M. and Elena E. Cevallos. "End-User Searching: Program Review and Future Prospects." RQ 31(2) (Winter 1991): 214-227.
- Bartolo, Laura M. and Timothy D. Smith. "Interdisciplinary Work and the Information Search Process: A Comparison of Manual and Online Searching." College and Research Libraries 54(4) (July 1993): 344-353.
- Bates, Marcia J. "The Design of Browsing and Berrypicking Techniques for the Online Search Interface." Online Review 13(5) (October 1989): 407-424.
- \_\_\_\_\_. "The Fallacy of the Perfect Thirty-Item Online Search." RQ 24(1) (Fall 1984): 43-50.
- Beck, Susan J. "Information Specialists' Use of Machine-Assisted Reference Tools: Evaluation Criteria." RQ 31(1) (Fall 1991): 35-38.
- Becker, Karen A. and Samuel T. Huang. "Implications of CD-ROM Usage for Bibliographic Instruction." In Academic Libraries: Achieving Excellence in Higher Education, edited by Thomas Kirk, 136-144. Chicago: ACRL, American Library Association, 1992.



- Belkin, Nicholas J. "Cognitive Models and Information Transfer." Social Science Information Studies 4 (1984): 111-129.
- \_\_\_\_\_. "The Cognitive Viewpoint in Information Science." Journal of Information Science 16 (1990): 11-15.
- \_\_\_\_\_. "User/Intermediary Interaction Analysis: Foundation for Designing Intelligent Information Systems." In Information Seeking: Basing Services on Users' Behaviors, edited by Jana Varlejs, 4-23. Jefferson, NC: McFarland and Company, Inc., 1987.
- Belkin, Nicholas J., Peter Ingwersen, and Annelise Mark Pejtersen, eds. SIGIR '92: Proceedings of the Fifteenth Annual International ACM SIGIR Conference on Research and Development in Information Retrieval Held in Copenhagen, Denmark 21-24 June 1992. New York, NY: Association for Computing Machinery, 1992.
- Belkin, Nicholas J. and W. Bruce Croft. "Retrieval Techniques." Annual Review of Information Science and Technology (ARIST) 22 (1987): 109-145.
- Belkin, Nicholas J., Shan-Ju Chang, Trudy Downs, Tefko Saracevic, and Shuyuan Zhao. "Taking Account of User Tasks, Goals and Behavior for the Design of Online Public Access Catalogs." ASIS '90: Proceedings of the ASIS Annual Meeting 27 (1990): 69-79.
- Bellardo, Trudi. "An Investigation of Online Searcher Traits and Their Relationship to Search Outcome." Journal of the American Society for Information Science 36(4) (July 1985): 241-250.
- Bellardo, Trudi and Tefko Saracevic. "Online Searching and Search Output: Relationships Between Overlap, Relevance, Recall and Precision." ASIS '87: Proceedings of the ASIS Annual Meeting 24 (1987): 11-13.
- Beth, Amy and Evan I. Farber. "Lessons from DIALOG: Technology Impacts Teaching/Learning." Library Journal 117 (15 September 1992): 26-30.
- Blumenthal, Caroline, Mary Jo Howard, and William R. Kinyon. "The Impact of CD-ROM Technology on a Bibliographic Instruction Program." College and Research Libraries 54(1) (January 1993): 11-16.
- Bodi, Sonia. "Collaborating with Faculty in Teaching Critical Thinking: The Role of Librarians." Research Strategies 10(2) (Spring 1992): 69-76.
- \_\_\_\_\_. "Critical Thinking and Bibliographic Instruction: The Relationship." The Journal of Academic Librarianship 14(3) (July 1988): 150-153.

- \_\_\_\_\_. "Learning Style Theory and Bibliographic Instruction: The Quest for Effective Bibliographic Instruction." In Academic Libraries: Achieving Excellence in Higher Education, edited by Thomas Kirk, 145-148. Chicago: ACRL, American Library Association, 1992.
- \_\_\_\_\_. "Teaching Effectiveness and Bibliographic Instruction: The Relevance of Learning Styles." College and Research Libraries 51(2) (March 1990): 113-119.
- \_\_\_\_\_. "Through a Glass Darkly: Critical Thinking and Bibliographic Instruction." Catholic Library World 61 (May/June 1990): 252-256.
- Borgman, Christine L. "All Users of Information Retrieval Systems are not Created Equal: An Exploration into Individual Differences." Information Processing and Management 25(3) (1989): 237-251.
- \_\_\_\_\_. "Human-Computer Interaction with Information Retrieval Systems: Understanding Complex Communication Behavior." Progress in Communication Sciences 7 (1986): 91-122.
- \_\_\_\_\_. "Individual Differences in the Use of Information Retrieval Systems: A Pilot Study." ASIS '86: Proceedings of the ASIS Annual Meeting 23 (1986): 20-31.
- \_\_\_\_\_. "Psychological Factors in Online Catalog Use, or Why Users Fail." In Training Users of Online Public Access Catalogs: Proceedings of the Conference by Trinity University and the Council on Library Resources Held in San Antonio, Texas 12-14 January 1983. Washington, D.C.: Council on Library Resources, 1983.
- \_\_\_\_\_. "Psychological Research in Human-Computer Interaction." Annual Review of Information Science and Technology (ARIST) 19 (1984): 33-64.
- \_\_\_\_\_. "The User's Mental Model of an Information Retrieval System: Effects on Performance." Ph.D. Dissertation, Stanford University, 1984.
- \_\_\_\_\_. "Why Are Online Catalogs Hard to Use? Lessons Learned from Information-Retrieval Studies." Journal of the American Society for Information Science 37 (1986): 387-400.
- Borgman, Christine L. and Edward Y. H. Pai, eds. Information and Technology: Planning for the Second 50 Years. ASIS '88: Proceedings of the 51st ASIS Annual Meeting Held in Atlanta, Georgia 23-27 October 1988. Medford, NJ: Published for the American Society for Information Science by Learned Information, Inc., 1988.

- Bostian, Rebecca and Anne Robbins. "Effective Instruction for Searching CD-ROM Indexes." The Laserdisk Professional 3(1) (January 1990): 14-17.
- Bostick, Sharon L. "The Development and Validation of the Library Anxiety Scale." Chapter 1 in Research in Reference Effectiveness, edited by Marjorie E. Murfin and Jo Bell Whitlach, 1-7. (RASD Occasional Papers, No. 16). Chicago: RASD, American Library Association, 1993.
- Bourne, Donna E. "End-Users, Front Ends and Librarians." Canadian Library Journal 46(5) (October 1989): 323-327.
- Breivik, Patricia Senn. "Education for the Information Age." New Directions for Higher Education 20(2) (Summer 1992): 5-13.
- Breivik, Patricia Senn and Dan L. Jones. "Information Literacy: Liberal Education for the Information Age." Liberal Education 79(1) (Winter 1993): 24-29.
- Breivik, Patricia Senn and E. Gordon Gee. "The Information Society and Higher Education." Chapter 2 in Information Literacy: Revolution in the Library. New York: Macmillan, 1989.
- Brown, Mary E. "Design for a Bibliographic Database for Non-Professional Users." ASIS '91: Proceedings of the ASIS Annual Meeting 28 (1991): 276-282.
- \_\_\_\_\_. "A General Model of Information Seeking Behavior." ASIS '91: Proceedings of the ASIS Annual Meeting 28 (1991): 9-14.
- Brundage, Christina A. "Teaching Controlled Vocabulary and Natural Language to End-Users of Scientific Online and CD-ROM Databases." Science and Technology Libraries 10(1) (Fall 1989): 1-13.
- Buchanan, Nancy L., Karen Rupp-Serrano, and Johanne LaGrange. "The Effectiveness of a Projected Computerized Presentation in Teaching Online Library Catalog Searching." College and Research Libraries 53(4) (July 1992): 307-318.
- Bucknall, Tim and Rikki Mangrum. "U-Search: A User Study of the CD-ROM Service at the University of North Carolina at Chapel Hill." RQ 31(4) (Summer 1992): 542-553.
- Bullinger, H.-J. and B. Shackel, eds. Human-Computer Interaction--INTERACT '87: Proceedings of the Second IFIP Conference on Human-Computer Interaction Held in Stuttgart, Germany 1-4 September 1987. Amsterdam, New York, and Oxford: North-Holland Publishing Company, 1987.

- Burt, Patricia V. and Mark T. Kinnucan. "Information Models and Modeling Techniques for Information Systems." Annual Review of Information Science and Technology (ARIST) 25 (1990): 175-208.
- Cameron, Lynn and James Hart. "Assessment of PsycLIT Competence, Attitudes, and Instructional Methods." Teaching of Psychology 19(4) (December 1992): 239-242.
- Carroll, John M., ed. Interfacing Thought: Cognitive Aspects of Human-Computer Interaction. Cambridge, Massachusetts: The MIT Press, 1987.
- Charles, Susan K. and Katharine E. Clark. "Enhancing CD-ROM Searches with Online Updates: An Examination of End-User Needs, Strategies, and Problems." College and Research Libraries 51(4) (July 1990): 321-328.
- Chen, Ching-chih, ed. Information: The Transformation of Society. ASIS '87: Proceedings of the 50th Annual Meeting Held in Boston, Massachusetts 4-8 October 1987. Medford, NJ: Published for the American Society for Information Science by Learned Information, Inc., 1987.
- Cheney, Debora. "Evaluation-Based Training: Improving the Quality of End-User Searching." The Journal of Academic Librarianship 17(3) (July 1991): 152-155.
- Cherry, Joan M. "Improving Subject Access in OPACs: An Exploratory Study of Conversion of Users' Queries." The Journal of Academic Librarianship 18(2) (May 1992): 95-99.
- Cherry, Joan M. and Marshall Clinton. "A Profile of User Background and User Satisfaction with the University of Toronto OPAC and the Implications for User Training and User Interfaces." ASIS '89: Proceedings of the ASIS Annual Meeting 26 (1989): 121-128.
- Clark, Katharine E. and Joni Gomez. "Faculty Use of Databases at Texas A&M University." RQ 30(2) (Winter 1990): 241-248.
- Collins, Bobbie L., Constance A. Mellon, and Sally B. Young. "The Needs and Feelings of Beginning Researchers." Chapter 6 in Bibliographic Instruction: The Second Generation, edited by Constance A. Mellon, 73-84. Littleton, Colorado: Libraries Unlimited, 1987.
- Collins, Kelly L. K. and Sharon Nelson Takacs. "Information Technology and the Teaching Role of the College Librarian." The Reference Librarian 18(39) (1993): 41-52.

- Coons, Bill and Jan Kennedy Olsen. "Imperatives for the Second Century: Information Literacy and the Quality of Undergraduate Education in America." In Building on the First Century, edited by Janice Fennell, 141-143. Chicago: ACRL, American Library Association, 1989.
- Crooks, James E. "User Aspects of Electronic Services: A Summary." In The Electronic Library: Linking People, Information, and Technology, edited by Jane Kleiner and Lea Orkiszewski, 14-19. Chicago: RASD, American Library Association, 1992.
- Culbertson, Michael. "Analysis of Searches by End-Users of Science and Engineering CD-ROM Databases in an Academic Library." CD-ROM Professional 5(2) (March 1992): 76-79.
- Dalrymple, Prudence W. "Retrieval by Reformulation in Two Library Catalogs: Toward a Cognitive Model of Searching Behavior." Journal of the American Society for Information Science 41(4) (June 1990): 272-281.
- Dalrymple, Prudence W. and Douglas L. Zweizig. "Users' Experience of Information Retrieval Systems: An Exploration of the Relationship Between Search Experience and Affective Measures." Library and Information Science Research 14(2) (April-June 1992): 167-181.
- Daniels, Penny J. "Cognitive Models in Information Retrieval: An Evaluative Review." Journal of Documentation 42 (1986): 272-304.
- Davis, Dorothy F. "A Comparison of Bibliographic Instruction Methods on CD-ROM Databases." Research Strategies 11(3) (Summer 1993): 156-163.
- Dennis, Nancy and Nancy D. Harrington. "Librarian and Faculty Member Differences in Using Information Technologies: A Prerequisite for Developing Effective Bibliographic Instruction Programs." RSR: Reference Services Review 18(3) (Fall 1990): 47-52.
- Dennis, Nancy and Alice Stadthaus. "New Technologies: A 3-Credit Course for Undergraduates." In Computers in Libraries '90, edited by Nancy Melin Nelson, 35-36. Westport, CT: Meckler, 1990.
- Dervin, Brenda. "From the Mind's Eye of the User: The Sense-Making Qualitative-Quantitative Methodology." Chapter 6 in Qualitative Research in Information Management, edited by Jack D. Glazier and Ronald R. Powell, 61-84. Englewood, CO: Libraries Unlimited, 1992.
- Dervin, Brenda and Michael Nilan. "Information Needs and Uses." Annual Review of Information Science and Technology (ARIST) 21 (1986): 3-33.

- Dervin, Brenda and Patricia Dewdney. "Neutral Questioning: A New Approach to the Reference Interview." RQ 25(4) (Summer 1986): 506-513.
- Dillon, Andrew. "A Psychological View of 'User-Friendliness.'" In Human-Computer Interaction--Interact '87, edited by H.-J. Bullinger and B. Shackel, 157-163. Amsterdam, New York, and Oxford: North-Holland Publishing Co., 1987.
- Dimitroff, Alexandra. "Mental Models Theory and Search Outcome in a Bibliographic Retrieval System." Library and Information Science Research 14(2) (April-June 1992): 141-156.
- Doyal, Patricia A. "Effective End-User Search Services: The Instructional Imperative." In 13th National Online Meeting Proceedings -- 1992, compiled by Martha E. Williams, 107-112. Medford, NJ: Learned Information, Inc., 1992.
- Doyle-Wilch, Barbara and Marian I. Miller. "Mediation and Schemata Theory in Meaningful Learning: The Academic Librarian's Role in the Educational Process." In The Reference Librarian and Implications of Mediation, edited by M. Keith Ewing and Robert Hauptman, 121-127. Binghamton, NY: Haworth Press, 1992.
- Dunn, Kathleen. "Psychological Needs and Source Linkages in Undergraduate Information-Seeking Behavior." College and Research Libraries 47(5) (September 1986): 475-481.
- Durrance, Joan. "The Influence of Reference Practices on the Client-Librarian Relation." College and Research Libraries 47 (1986): 57-67.
- Dusenbury, Carolyn. "Library Literacy and Lifelong Learning." In Coping with Information Illiteracy: Bibliographic Instruction for the Information Age, edited by Glenn E. Mensching, Jr. and Teresa B. Mensching, 87-90. Ann Arbor, Michigan: Pierian Press, 1989.
- Egan, Philip J. "Bridging the Gap Between the Student and the Library." College Teaching 40(2) (Spring 1992): 67-70.
- Eisenberg, Michael and Linda Schamber. "Relevance: The Search for a Definition." ASIS '88: Proceedings of the ASIS Annual Meeting 25 (1988): 164-168.
- Ellis, David. "A Behavioral Approach to Information Retrieval Design." Journal of Documentation 45(3) (September 1989): 171-212.
- Ellis, David. "The Physical and Cognitive Paradigms in Information Research." Journal of Documentation 48(1) (March 1992): 45-64.



Engeldinger, Eugene A. "Bibliographic Instruction and Critical Thinking: The Contribution of the Annotated Bibliography." RQ 28(2) (Winter 1988): 195-202.

\_\_\_\_\_. "Bibliographic Instruction and the Teaching of Critical Thinking." Judging the Validity of Information Sources: Teaching Critical Analysis in Bibliographic Instruction, edited by Linda Shirato, 29-46. Ann Arbor, Michigan: Pierian Press, 1991.

Ensor, Pat. "Knowledge Level of Users and Nonusers of Keyword/Boolean Searching on an Online Public Access Catalog." RQ 31(1) (Fall 1992): 60-74.

\_\_\_\_\_. "User Characteristics of Keyword Searching in an OPAC." College and Research Libraries 53(1) (January 1992): 72-80.

\_\_\_\_\_. "User Practices in Keyword and Boolean Searching on an Online Public Access Catalog." Information Technology and Libraries 11(3) (September 1992): 210-219.

Evans, Anita K. "Electronic Reference Services: Mediation for the 1990s." In The Reference Librarian and Implications of Mediation, edited by M. Keith Ewing and Robert Hauptman, 75-86. Binghamton, NY: Haworth Press, 1992.

Ewing, M. Keith and Robert Hauptman, eds. The Reference Librarian and Implications of Mediation. Binghamton, NY: The Haworth Press, Inc., 1992.

Farber, Evan and others. "Total Access to Information: The Impact on Classroom Teaching." In Academic Libraries: Achieving Excellence in Higher Education, edited by Thomas Kirk, 479-482. Chicago: ACRL, American Library Association, 1992.

Farmer, D. W. and Terrence F. Mech, eds. Information Literacy: Developing Students as Independent Learners. New Directions for Higher Education, No. 78. San Francisco: Jossey-Bass Publishers, 1992.

Fenichel, Carol H. "Online Searching: Measures that Discriminate Among Users with Different Types of Experience." Journal of the American Society for Information Science 32(1) (January 1981): 23-32.

\_\_\_\_\_. "The Process of Searching Online Bibliographic Databases: A Review of the Research." Library Research 2 (1980): 107-127.

Fennell, Janice C., ed. Building on the First Century: Proceedings of the Fifth National Conference of the Association of College and Research Libraries Held in Cincinnati, Ohio 5-8 April 1989. Chicago: ACRL, American Library Association, 1989.

- Fidel, Raya. "Controlled Vocabulary and Free-Text Searching: Searchers' Selection of Search Keys." ASIS '87: Proceedings of the ASIS Annual Meeting 24 (1987): 71-73.
- \_\_\_\_\_. Extracting Knowledge for Intermediary Expert Systems: The Selection of Search Keys, Final Report. Washington, DC: National Science Foundation, Division of Information Science and Technology, 1988. ERIC, ED 314 059.
- \_\_\_\_\_. "Factors Affecting the Selection of Search Keys." ASIS '88: Proceedings of the ASIS Annual Meeting 25 (1988): 76-79.
- \_\_\_\_\_. "Online Searching Styles." ASIS '90: Proceedings of the ASIS Annual Meeting 27 (1990): 98-103.
- \_\_\_\_\_. "Searchers' Selection of Search Keys: I. The Selection Routine." Journal of the American Society for Information Science 42(7) (August 1991): 490-500.
- \_\_\_\_\_. "Searchers' Selection of Search Keys: II. Controlled Vocabulary or Free-Text Searching." Journal of the American Society for Information Science 42(7) (August 1991): 501-514.
- \_\_\_\_\_. "Searchers' Selection of Search Keys: III. Searching Styles." Journal of the American Society for Information Science 42(7) (August 1991): 515-527.
- Fielder, Marie and Mary M. Huston. "Access Ability: Harnessing Knowledge of 'Thinking Like a Searcher.'" Library Trends 39(3) (Winter 1991): 299-315.
- Fine, Sara. "Research and the Psychology of Information Use." Library Trends 32(4) (Spring 1984): 441-460.
- Fink, Deborah. "Critical Thinking = Creative Problem Solving + Critical Evaluation." In Judging the Validity of Information Sources: Teaching Critical Analysis in Bibliographic Instruction, edited by Linda Shirato, 15-27. Ann Arbor, Michigan: Pierian Press, 1991.
- Fister, Barbara. "The Research Processes of Undergraduate Students." The Journal of Academic Librarianship 18(3) (July 1992): 163-169.
- \_\_\_\_\_. "Teaching Research as a Social Act: Collaborative Learning and the Library." RQ 29(4) (Summer 1990): 505-509.
- Fleming, Hugh. "Educating the Future End-User of Online Information Services." In User Education in Academic Libraries, edited by Hugh Fleming, 139-164. London: The Library Association, 1990.



- Fleming, Hugh, ed. User Education in Academic Libraries. London: Library Association Publishing Ltd., 1990.
- Ford, Nigel. "Learning Styles, Strategies, and Stages." In User Education in Academic Libraries, edited by Hugh Fleming, 29-42. London: The Library Association, 1990.
- \_\_\_\_\_. "Psychological Determinants of Information Needs: A Small-Scale Study of Higher Education Students." Journal of Librarianship 18(1) (January 1986): 47-62.
- \_\_\_\_\_. "Research and Practice in Librarianship: A Cognitive View." The Reference Librarian 18 (1987): 21-47.
- Fowler, C. J. H. and D. Murray. "Gender and Cognitive Style Differences at the Human-Computer Interface." In Human-Computer Interaction--INTERACT '87, edited by H.-J. Bullinger and B. Shackel, 709-714. Amsterdam, New York, and Oxford: North-Holland Publishing Company, 1987.
- Frank, Polly. "Information Literacy and Lifelong Learning." In Coping With Information Illiteracy: Bibliographic Instruction for the Information Age, edited by Glenn E. Mensching, Jr. and Teresa B. Mensching, 96-109. Ann Arbor, Michigan: Pierian Press, 1989.
- Frick, Elizabeth. "Critical Analysis as a Pivotal Act: Information Literacy or Spinach?" In Judging the Validity of Information Sources: Teaching Critical Analysis in Bibliographic Instruction, edited by Linda Shirato, 1-6. Ann Arbor, Michigan: Pierian Press, 1991.
- Friend, Linda. "Independence at the Terminal: Training Student End Users to Do Online Literature Searching." The Journal of Academic Librarianship 11(2) (July 1985): 136-141.
- Frost, Carolyn O. "Faculty Use of Subject Searching in Card and Online Catalogs." The Journal of Academic Librarianship 13(2) (May 1987): 86-92.
- Glazier, Jack D. "Qualitative Research Methodologies for Library and Information Science: An Introduction." Chapter 1 in Qualitative Research in Information Management, edited by Jack D. Glazier and Ronald R. Powell, 1-13. Englewood, Colorado: Libraries Unlimited Inc., 1992.
- Glazier, Jack D. and Ronald R. Powell, eds. Qualitative Research in Information Management. Englewood, Colorado: Libraries Unlimited Inc., 1992.

- Glitz, Beryl. "The Role of Medical Libraries in End-User Searching: Teaching the MEDLINE Database to Health Care Professionals." Science and Technology Libraries 10(1) (Fall 1989): 47-54.
- Gorman, Michael, ed. Convergence: Proceedings of the Second National Conference of the Library and Information Technology Association, Held in Boston 2-6 October 1988. Chicago: American Library Association, 1990.
- Green, Rebecca. "The Profession's Models of Information: A Cognitive Linguistic Analysis." Journal of Documentation 47(2) (June 1991): 130-148.
- Greene, Sharon L., Susan J. Devlin, Philip E. Cannata, and Louis M. Gomez. "No IFs, ANDs, or ORs: A Study of Database Querying." International Journal of Man-Machine Studies 32 (1990): 303-326.
- Griffiths, Jose-Marie, ed. ASIS '91: Proceedings of the 54th Annual Meeting Held in Washington, DC 27-31 October 1991. Medford, NJ: Published for the American Society for Information Science, 1991.
- Guthrie, John T., Tracy Britten and K. Georgene Barker. "Roles of Document Structure, Cognitive Strategy, and Awareness in Searching for Information." Reading Research Quarterly 26(3) (1991): 300-324.
- Halpern, David and Michael S. Nilan. "A Step Toward Shifting the Research Emphasis in Information Science from the System to the User: An Empirical Investigation of Source-Evaluation Behavior in Information Seeking and Use." ASIS '88: Proceedings of the ASIS Annual Meeting 25 (1988): 169-176.
- Hamilton, Dennis. "Library Users and Online Systems: Suggested Objectives for Library Instruction." RQ 25 (Winter 1985): 195-197.
- Hannafin, Michael J. and Lloyd P. Rieber. "Psychological Foundations of Instructional Design for Emerging Computer-Based Instructional Technologies." Educational Technology Research and Development 37(2) (1989): 91-114. (2 Parts)
- Hardesty, Larry, Jamie Hastreiter, and David Henderson, eds. Bibliographic Instruction in Practice: A Tribute to the Legacy of Evan Ira Farber. Based on the 5th Earlham College - Eckerd College Bibliographic Instruction Conference Held on 5-7 February 1992. Ann Arbor, Michigan: Pierian Press, 1993.
- Hatchard, Desmond B. and Phyllis Toy. "Librarians' Views on the Psychological Barriers Problem." Australian Academic and Research Libraries 17 (December 1986): 202-206.

- Hatchard, Dennis B. and Christine Crocker. "Library Users: A Psychological Profile." Australian Academic and Research Libraries 21 (June 1990): 97-105.
- Hatchard, Desmond B. and Phyllis Toy. "The Psychological Barriers Between Library Users and Library Staff -- An Exploratory Investigation." Australian Academic and Research Libraries 17 (June 1986): 63-69.
- Henderson, Diane, ed. ASIS '90: Proceedings of the 53rd ASIS Annual Meeting Held in Toronto, Ontario 4-8 November 1990. Medford, NJ: Published for the American Society for Information Science, 1990.
- Hensley, Randall. "Learning Style Theory and Learning Transfer Principles During Reference Interview Instruction." Library Trends 39(3) (Winter 1991): 203-209.
- Hert, Carol A. "Exploring a New Model for Understanding Information Retrieval Interactions." ASIS '92: Proceedings of the ASIS Annual Meeting. 29 (1992): 72-75.
- Hert, Carol A. and Michael S. Nilan. "User-Based Information Retrieval System Interface Evaluation: An Examination of an Online Public Access Catalog." ASIS '91: Proceedings of the ASIS Annual Meeting 28 (1991): 170-177.
- Hewett, Thomas T. and Sari Scott. "The Use of Thinking-out-loud and Protocol Analysis in Development of a Process Model of Interactive Database Searching." In Human-Computer Interaction--INTERACT '87, edited by H.-J. Bullinger and B. Shackel, 51-56. Amsterdam, New York, and Oxford: North-Holland Publishing Company, 1987.
- Hewins, Elizabeth T. "Information Need and Use Studies." Annual Review of Information Science and Technology (ARIST) 25 (1990): 145-172.
- Hicks, Jack A. "Mediation in Reference Service to Extend Patron Success." In The Reference Librarian and Implications of Mediation, edited by M. Keith Ewing and Robert Hauptman, 49-64. Binghamton, NY: Haworth Press, 1992.
- Hixson, Charles R. "CD-ROM and the Undergraduate: Reference and Instruction at Risk." RSR: Reference Services Review 21(3) (1993): 31-48.
- Hjorland, B. "Psychology and Information Search Strategy: 'Information Input Overload.'" Social Science Information Studies 4 (1984): 143-148.
- Hollnagel, Erik. "Cognitive Models, Cognitive Tasks, and Information Retrieval." In Knowledge Engineering: Expert Systems and Information Retrieval, edited by Irene Wormell, 34-52. London and Los Angeles: Taylor Graham, 1987.

- Horne, Esther E. "An Investigation into Self-Questioning Behavior During Problem-Solving." ASIS '90: Proceedings of the ASIS Annual Meeting 27 (1990): 86-97.
- Howard, Helen. "Measures that Discriminate among Online Searchers with Different Training and Experience." Online Review 6(4) (August 1982): 315-327.
- Howden, Norman, Danny P. Wallace, and Bert R. Boyce. "SCIMATE as a Learning Tool for Online Searching." ASIS '87: Proceedings of the ASIS Annual Meeting 24 (1987): 111-115.
- Hunter, Rhonda N. "Successes and Failures of Patrons Searching the Online Catalog at a Large Academic Library: A Transaction Log Analysis." RQ 30(3) (Spring 1991): 395-402.
- Hurd, Julie M., ed. ASIS '86: Proceedings of the 49th ASIS Annual Meeting Held in Chicago, Illinois 28 September - 2 October 1986. Medford, NJ: Published for the American Society for Information Science by Learned Information, Inc., 1986.
- Hurd, Julie M., Ann C. Weller, and Karen L. Curtis. "Information Seeking Behavior of Faculty: Use of Indexes and Abstracts by Scientists and Engineers." ASIS '92: Proceedings of the ASIS Annual Meeting 29 (1992): 136-143.
- Hurych, Jitka. "After Bath: Scientists, Social Scientists, and Humanists in the Context of Online Searching." The Journal of Academic Librarianship 12(3) (July 1986): 158-165.
- Huston, Mary M. "Extending Information Universes Through Systems Thinking." C&RL News 51(8) (September 1990): 692-695.
- \_\_\_\_\_. "Search Theory and Instruction for End Users of Online Bibliographic Information Retrieval Systems: A Literature Review." Research Strategies 7(1) (Winter 1989): 14-32.
- \_\_\_\_\_. "Toward Contextual Sensitivity: Approaches to End User Instruction in the USA." Electronic Library 7(3) (June 1989): 164-168.
- \_\_\_\_\_. "Windows into the Search Process: An Inquiry into Dimensions of Online Information Retrieval." Online Review 15 (1991): 227-243.
- Huston, Mary M., ed. "Toward Information Literacy -- Innovative Perspectives for the 1990s." Library Trends 39(3) (Winter 1991): 187-366.

- Huston, Mary M. and Cerise Oberman. "Making Communication: A Theoretical Framework for Educating End-Users of Online Bibliographic Information Retrieval Systems." The Reference Librarian 24 (1989): 199-211.
- Ikeda, Naomi R. and Diane G. Schwartz. "Impact of End-User Search Training on Pharmacy Students: A Four-Year Follow-Up Study." Bulletin of the Medical Library Association 80(2) (April 1992): 124-130.
- Ingwersen, Peter. "Psychological Aspects of Information Retrieval." Social Science Information Studies 4 (1984): 83-95.
- \_\_\_\_\_. "Search Procedures in the Library -- Analysed from the Cognitive Point of View." Journal of Documentation 38(3) (September 1982): 165-169.
- \_\_\_\_\_. "Towards a New Research Paradigm in Information Retrieval." In Knowledge Engineering: Expert Systems and Information Retrieval, edited by Irene Wormell, 150-162. London and Los Angeles: Taylor Graham, 1987.
- Isbell, Dennis and Carol Hammond. "Information Literacy Competencies." C&RL News 54(6) (June 1993): 325-327.
- Jackson-Brown, Grace and Gwen Pershing. "Comparisons of Graduate and Undergraduate End-Users of ERIC and PsycLIT on CD-ROM." In Academic Libraries: Achieving Excellence in Higher Education, edited by Thomas Kirk, 162-167. Chicago: ACRL, American Library Association, 1992.
- Jacobson, Frances F. and Michael J. Jacobson. "Bibliographic Instruction in the Electronic Environment: Incorporating Recent Cognitive Theories of Learning." In Academic Libraries: Achieving Excellence in Higher Education, edited by Thomas Kirk, 168-174. Chicago: ACRL, American Library Association, 1992.
- Jacobson, Frances F. and Michael J. Jacobson. "Representative Cognitive Learning Theories and BI: A Case Study of End User Searching." Research Strategies 11(3) (Summer 1993): 124-137.
- Jacobson, Thomas and David Fusani. "Computer, System, and Subject Knowledge in Novice Searching of a Full-Text, Multifile Database." Library and Information Science Research 14(1) (January to March 1992): 97-106.
- Jacobson, Trudi E. "All I Need Is In the Computer: Reference and Bibliographic Instruction in the Age of CD-ROMs." The Reference Librarian 17(38) (1992): 221-228.

- Jacobson, Trudi E. and Lynne M. Martin. "Merging Critical Thinking and the Electronic Library: A Visionary Perspective of SuperPAC, an Enhanced OPAC." Research Strategies 11(3) (Summer 1993): 138-149.
- Jakobovits, Leon A. and Diane Nahl-Jakobovits. "Learning the Library: Taxonomy of Skills and Errors." College and Research Libraries 48(3) (May 1987): 203-214.
- Jakobovits, Leon A. and Diane Nahl-Jakobovits. "Measuring Information Searching Competence." College and Research Libraries 51(5) (September 1990): 448-462.
- Jayatileke, Raja. "CD-ROM End User Searching: Menu-Driven Versus Command Mode." In Proceedings of the 13th National Online Meeting, compiled by Martha E. Williams, 137-146. Medford, NJ: Learned Information, Inc., 1992.
- Jeng, Ling Hwey. "Information Literacy for Information Professionals." ASIS '89: Proceedings of the ASIS Annual Meeting 26 (1989): 188-191.
- Johnson, Kerry A. and Marilyn D. White. "The Cognitive Style of Information Professionals." Journal of Education for Librarianship 22(3) (Winter 1982): 127-142.
- Johnson, Kerry A. and Marilyn D. White. "The Cognitive Style of Reference Librarians." RQ 21(3) (Spring 1982): 239-246.
- Johnson, Mary E. and Barbara S. Rosen. "CD-ROM End-User Instruction: A Planning Model." Laserdisk Professional 3(2) (March 1990): 35-40.
- Kalin, Sally W. "The Searching Behavior of Remote Users: A Study of One Online Public Access Catalog (OPAC)." ASIS '91: Proceedings of the ASIS Annual Meeting 28 (1991): 178-185.
- Katzer, Jeffrey and Gregory B. Newby, eds. ASIS' 89: Proceedings of the 52nd ASIS Annual Meeting Held in Washington, DC 30 October - 2 November 1989. Medford, NJ: Published for the American Society for Information Science by Learned Information, Inc., 1989.
- Keefer, Jane. "The Hungry Rats Syndrome: Library Anxiety, Information Literacy, and the Academic Reference Process." RQ 32(3) (Spring 1993): 333-339.
- Keefer, Jane A. and Stuart A. Karabenick. "Help-Seeking and the Library Reference/Instruction Setting: A Social-Psychological Perspective." In What is Good Instruction Now? Library Instruction for the 90s, edited by Linda Shirato, 63-71. Ann Arbor, Michigan: Pierian Press, 1993.



- Kemp, Alisdair. "Users." In User Education in Academic Libraries, edited by Hugh Fleming, 3-28. London: The Library Association, 1990.
- Kenny, Richard F. and Eileen Schroeder. "An Evaluation of a Training and Assistance Program for the CD-ROM Databases: Reflections on the Process." RSR: Reference Services Review 20(2) (1992): 41-48.
- King, David and Betsy Baker. "Human Aspects of Library Technology: Implications for Academic Library User Education." In Bibliographic Instruction: The Second Generation, edited by Constance A. Mellon, 85-107. Littleton, Colorado: Libraries Unlimited, 1987.
- King, David and Betsy Baker. "Teaching End-Users to Search: Issues and Problems." In Bibliographic Instruction and Computer Database Searching, edited by Teresa B. Mensching and Keith J. Stanger, 27-33. Ann Arbor, Michigan: Pierian Press, 1988.
- Kirk, Thomas, ed. Academic Libraries: Achieving Excellence in Higher Education. Proceedings of the Sixth National Conference of the Association of College and Research Libraries Held in Salt Lake City, Utah 12-14 April 1992. Chicago: ACRL, American Library Association, 1992.
- Kirkendall, Carolyn A., ed. Bibliographic Instruction and the Learning Process: Theory, Style and Motivation. Papers Presented at the Twelfth Annual Library Instruction Conference Held at Eastern Michigan University 6-7 May 1982. (Library Orientation Series, No. 14). Ann Arbor, Michigan: Pierian Press, 1984.
- Kirkendall, Carolyn A., ed. Teaching the Online Catalog User: Papers and Work Session Notes Presented at the Second Biennial LOEX Library Instruction Workshop Held at Eastern Michigan University, 9-10 May 1985. (Library Orientation Series, No. 16). Ann Arbor, Michigan: Published for the Center of Educational Resources, Eastern Michigan University by Pierian Press, 1988.
- Kleiner, Jane and Lea Orkiszewski, eds. The Electronic Library: Linking People, Information, and Technology. Summaries of the Papers Presented at the ALA/RASD Machine-Assisted Reference Section Preconference Held in Atlanta, Georgia 28 June 1991. (RASD Occasional Paper, No. 14). Chicago: RASD, American Library Association, 1992.
- Korfhage, Robert, Edie Rasmussen, and Peter Willett, eds. SIGIR '93: Proceedings of the Sixteenth Annual International ACM SIGIR Conference on Research and Development in Information Retrieval Held in Pittsburgh, Pennsylvania 27 June - 1 July 1993. New York, NY: Association for Computing Machinery Press, 1993.

Krikelas, James. "Information-Seeking Behavior: Patterns and Concepts." Drexel Library Quarterly 19 (1983): 5-20.

Kuhlthau, Carol C. "Developing a Model of the Library Search Process: Cognitive and Affective Aspects." RQ 28(2) (Winter 1988): 232-242.

\_\_\_\_\_. "The Information Search Process: From Theory to Practice." Journal of Education for Library and Information Science 31(1) (Summer 1990): 72-75.

\_\_\_\_\_. "Inside the Search Process: Information Seeking from the User's Perspective." Journal of the American Society for Information Science 42(5) (June 1991): 361-371.

\_\_\_\_\_. "Longitudinal Case Studies of the Information Search Process of Users in Libraries." Library and Information Science Research 10(3) (July-September 1988): 257-304.

\_\_\_\_\_. "The Process Approach to Bibliographic Instruction: An Examination of the Search Process in Preparation for Writing the Research Paper." In Judging the Validity of Information Sources: Teaching Critical Analysis in Bibliographic Instruction, edited by Linda Shirato, 7-14. Ann Arbor, Michigan: Pierian Press, 1991.

Kuhlthau, Carol C., Amanda Spink, and Colleen Cool. "Exploration into Stages in the Information Search Process in Online Information Retrieval: Communication Between Users and Intermediaries." ASIS '92: Proceedings of the ASIS Annual Meeting 29 (1992): 67-71.

Kuhlthau, Carol C., Betty J. Turock, Jana Varlejs, Mary W. George, and Robert J. Belvin. Facilitating Information Seeking through Cognitive Modeling of the Search Process: A Library Studies Research Project. Washington, DC: Office of Educational Research and Improvement, 1989. ERIC, ED 328 268.

Kuhlthau, Carol C., Betty J. Turock, and Robert J. Belvin. "Facilitating Information Seeking through Cognitive Models of the Search Process." ASIS '88: Proceedings of the ASIS Annual Meeting 25 (1988): 70-75.

Kuhlthau, Carol C., Robert J. Belvin, and Mary W. George. "Flowcharting the Information Search: A Method of Eliciting Users' Mental Maps." ASIS '89: Proceedings of the ASIS Annual Meeting 26 (1989): 162-165.

Kupersmith, John. "Technostress and the Reference Librarian." RSR: Reference Services Review 20(2) (1992): 7-14.



- Laborie, Tim and Ken Garson. "End User Search Systems: Access to Library and Information Science Literature." Library Trends 36(4) (Spring 1988): 805-823.
- Landauer, Thomas K. "Relations Between Cognitive Psychology and Computer System Design." In Interfacing Thought: Cognitive Aspects of Human-Computer Interaction, edited by John M. Carroll, 1-25. Cambridge, Massachusetts: MIT Press, 1987.
- LePoer, Peter M. and Carol A. Mularski. "CD-ROM's Impact on Libraries and Users." Laserdisk Professional 2(4) (July 1989): 39-45.
- Linde, Lena and Monica Bergstrom. "Impact of Prior Knowledge of Informational Content and Organization on Learning Search Principles in a Database." Contemporary Educational Psychology 13 (1988): 90-101.
- Littlejohn, Alice C. "End-User Searching in an Academic Library -- The Students' View." RQ 26(4) (Summer 1987): 460-466.
- Litzinger, Mary Ellen and Bonnie Osif. "Accommodating Diverse Learning Styles: Designing Instruction for Electronic Information Sources." In What is Good Instruction Now? Library Instruction for the 90s, edited by Linda Shirato, 73-81. Ann Arbor, Michigan: Pierian Press, 1993.
- Liu, Mengxiong. "The Complexity of Science Faculty's Information Seeking Behavior." In Academic Libraries: Achieving Excellence in Higher Education, edited by Thomas Kirk, 340-345. Chicago: ACRL, American Library Association, 1992.
- Logan, Elisabeth. "Cognitive Styles and Online Behavior of Novice Searchers." Information Processing and Management 26(4) (1990): 503-510.
- Logan, Elisabeth and Nancy N. Woelfl. "Individual Differences in Online Searching Behavior of Novice Searchers." ASIS '86: Proceedings of the ASIS Annual Meeting 23 (1986): 163-201.
- MacDonald, Linda Brew. "Instruction for and with CD-ROM." Chapter 4 in Teaching Technologies in Libraries: A Practical Guide, edited by Linda Brew MacDonald, Mara R. Saule, Margaret W. Gordon, and Craig A. Robertson, 87-118. Boston, Mass.: G. K. Hall & Co., 1990.
- Manderack, Scott B. and John Mark Tucker. "Selected Readings on Bibliographic Instruction, 1980-1992." In Bibliographic Instruction in Practice: A Tribute to the Legacy of Evan Ira Farber, edited by Larry Hardesty, 139-152. Ann Arbor, Michigan: Pierian Press, 1993.

- Marchionini, Gary, Sandra Dwiggin, Andrew Katz, and Xia Lin. "Information Seeking in Full-Text End-User-Oriented Search Systems: The Roles of Domain and Search Expertise." Library and Information Science Research 15 (Winter 1993): 35-69.
- Masters, Deborah. "Library Users and Online Systems: Suggested Objectives for Library Instruction." In Teaching the Online Catalog User, edited by Carolyn A. Kirkendall, 29-32. Ann Arbor, Michigan: Pierian Press, 1988.
- McClintock, Marsha Hamilton, ed. Training Users of Online Public Access Catalogs: Report of a Conference Sponsored by Trinity University and the Council on Library Resources Held in San Antonio, Texas 12-14 January 1983. Washington, DC: Council on Library Resources, Inc., 1983.
- McNeer, Elizabeth J. "Learning Theories and Library Instruction." The Journal of Academic Librarianship 17(5) (November 1991): 294-297.
- Mellon, Constance A. "Attitudes: The Forgotten Dimension in Library Instruction." Library Journal 113(4) (September 1, 1988): 137-139.
- \_\_\_\_\_. "Information Problem-Solving: A Developmental Approach to Library Instruction." In Theories of Bibliographic Education: Designs for Teaching, edited by Cerise Oberman and Katina Strauch, 75-89. New York and London: R. R. Bowker, 1982.
- \_\_\_\_\_. "Library Anxiety: A Grounded Theory and Its Development." College and Research Libraries 47(2) (March 1986): 160-165.
- \_\_\_\_\_. "Library Anxiety and the Non-Traditional Student." In Reaching and Teaching Diverse Library User Groups, edited by Teresa B. Mensching, 77-81. Ann Arbor, Michigan: Pierian Press, 1989.
- Mellon, Constance A., ed. Bibliographic Instruction: The Second Generation. Littleton, Colorado: Libraries Unlimited, 1987.
- Mellon, Constance A. and Kathryn E. Pagles. "Bibliographic Instruction and Learning Theory." In Bibliographic Instruction: The Second Generation, edited by Constance A. Mellon, 134-142. Littleton, Colorado: Libraries Unlimited, 1987.
- Mensching, Glenn E., Jr. and Teresa B. Mensching, eds. Coping With Information Illiteracy: Bibliographic Instruction for the Information Age. Papers Presented at the Seventeenth National LOEX Library Instruction Conference Held in Ann Arbor, Michigan 4-5 May 1989. (Library Orientation Series, No. 20). Ann Arbor, Michigan: Published for Learning Resources and Technologies, Eastern Michigan University by Pierian Press, 1989.

- Mensingh, Teresa B., ed. Reaching and Teaching Diverse Library User Groups: Papers Presented at the Sixteenth National LOEX Library Instruction Conference Held at Bowling Green State University 5-6 May 1988. (Library Orientation Series, No. 19). Ann Arbor, Michigan: Published for Learning Resources and Technologies, Eastern Michigan University by Pierian Press, 1989.
- Mensingh, Teresa B. and Keith J. Stanger, eds. Bibliographic Instruction and Computer Database Searching: Papers Presented at the Fourteenth Library Instruction Conference Held at Eastern Michigan University 8-9 May 1986. (Library Orientation Series, No. 17). Ann Arbor, Michigan: Pierian Press, 1988.
- Metoyer-Duran, Cheryl. "Information Gatekeepers." Annual Review of Information Science and Technology (ARIST) 28 (1993): 111-150.
- Meyer, Daniel E. and Den Ruiz. "End-User Selection of Databases -- Part 1: Science/Technology/Medicine." Database 13(3) (June 1990): 21-23,26-29.
- Miericke, Susan. "Creating Hospitable Environments for Technologically Naive Users: Y'all Come Back Now, Hear!" Library Trends 39(3) (Winter 1991): 327-334.
- Miller, Connie and Patricia Tegler. "Online Searching and the Research Process." College and Research Libraries 47(4) (July 1986): 370-373.
- Miller, William. "The Future of Bibliographic Instruction and Information Literacy for the Academic Librarian." In The Evolving Educational Mission of the Library, edited by Betsy Baker and Beth Sandore, 140-157. Chicago: ACRL, American Library Association, 1992.
- Mischo, William M. and Jounghyoun Lee. "End-User Searching of Bibliographic Databases." Annual Review of Information Science and Technology (ARIST) 22 (1987): 227-263.
- Moody, Marilyn K. "Documents Search Strategies and General Reference Search Strategies: An Analysis and Comparison." Reference Librarian 32 (1991): 57-69.
- Mularski, Carol A. and Pamela S. Bradigan. "End-User Searching: Review of a Modular Program." Bulletin of the Medical Library Association 81(1) (January 1993): 61-63.
- Murfin, Marjorie E. and Jo Bell Whitlach, eds. Research in Reference Effectiveness: Proceedings of a Preconference Sponsored by the Research and Statistics Committee, Management and Operations of Public Services Section, Reference and Adult Services Division, American Library Association Held in San Francisco, California 26 June 1992. (RASD Occasional Papers, No 16). Chicago: RASD, American Library Association, 1993.

- Nahl-Jakobovits, Diane and Leon A. Jakobovits. "Bibliographic Instructional Design for Information Literacy: Integrating Affective and Cognitive Objectives." Research Strategies 11(2) (Spring 1993): 73-88.
- Nahl-Jakobovits, Diane and Leon A. Jakobovits. "A Content Analysis Method for Developing User-Based Objectives." Research Strategies 10(1) (Winter 1992): 4-16.
- Nahl-Jakobovits, Diane and Leon A. Jakobovits. "Problem Solving, Creative Librarianship, and Search Behavior." College and Research Libraries 49(5) (September 1988): 400-408.
- Nash, Stan and Myoung C. Wilson. "Value-Added Bibliographic Instruction: Teaching Students to Find the Right Citations." RSR: Reference Services Review 19(1) (Spring 1991): 87-92.
- Nelson, Nancy Melin, ed. Computers in Libraries '90: Proceedings of the 5th Annual Computers in Libraries Conference Held at Crystal City, Virginia 5-7 March 1990. Westport, CT: Meckler, 1990.
- Nielsen, Brian. "Teacher or Intermediary: Alternative Professional Models in the Information Age." In Bibliographic Instruction: The Second Generation, edited by Constance A. Mellon, 26-37. Littleton, Colorado: Libraries Unlimited, 1987. (Reprinted from College and Research Libraries, May, 1982).
- Nilan, Michael S., Robin P. Peek, and Herbert W. Snyder. "A Methodology for Tapping User Evaluation Behaviors: An Exploration of Users' Strategy, Source and Information Evaluating." ASIS '88: Proceedings of the ASIS Annual Meeting 25 (1988): 152-159.
- Niles, Nancy and Trudi E. Jacobson. "'Teaching Critical Thinking in Libraries': A Continuing Education Course." Research Strategies 9(4) (Fall 1991): 198-201.
- Nitecki, Danuta A., ed. Energies for Transition: Proceedings of the Fourth National Conference of the Association of College and Research Libraries Held in Baltimore, Maryland 9-12 April 1986. Chicago: ACRL, American Library Association, 1986.
- Oberman, Cerise. "Avoiding the Cereal Syndrome, or Critical Thinking in the Electronic Environment." Library Trends 39(3) (Winter 1991): 189-202.
- Oberman, Cerise and Katina Strauch, eds. Theories of Bibliographic Education: Designs for Teaching. New York and London: R. R. Bowker, 1982.
- Olsen, Jan Kennedy. "The Electronic Library and Literacy." New Directions for Higher Education 20(2) (Summer 1992): 91-102.

- Palmquist, Ruth A. and George M. Sinkankas. "Client Needs Without Clients: Can We Understand Information Needs Without Clients Present to Explain Them?" ASIS '91: Proceedings of the ASIS Annual Meeting 28 (1991): 203-210.
- Palmquist, Ruth A. and Pradeep Singh. "Testing the Importance of a Simple Thesaurus Enhancement for a Natural Language Statement of an Information Need." ASIS '87: Proceedings of the ASIS Annual Meeting 24 (1987): 193-195.
- Palmquist, Ruth A. and Bhaskaran Balakrishnan. "Using a Continuous Word Association Test to Enhance a User's Description of an Information Need: A Quasi-Experimental Study." ASIS '88: Proceedings of the ASIS Annual Meeting 25 (1988): 160-163.
- Pask, Judith M. User Education for Online Systems in Libraries: A Selective Bibliography 1970-1988. Metuchen, NJ: Scarecrow Press, 1990.
- Pausch, Lois M. and Mary Pagliero Popp. "Bridges to the Future: A Changing Focus for Bibliographic Instruction and Information Literacy." In Building on the First Century, edited by Janice C. Fennell, 166-169. Chicago: ACRL, American Library Association, 1989.
- Penhale, Sara J. and Nancy Taylor. "Integrating End-User Searching into a Bibliographic Instruction Program." RQ 27(2) (Winter 1986): 212-220.
- Peters, Thomas A. "When Smart People Fail: An Analysis of the Transaction Log of an Online Public Access Catalog." The Journal of Academic Librarianship 15(5) (November 1989): 267-273.
- Pfaffenberger, Bryan. "The Emerging Patterns of End-User Searching." Chapter 4 in Democratizing Information: Online Databases and the Rise of End-User Searching, by Bryan Pfaffenberger, 99-120. Boston, Massachusetts: G. K. Hall & Co., 1990.
- Piele, Linda J. "Reference Services and Staff Training for Patron-Use Software." Library Trends 40(1) (Summer 1991): 97-119.
- Poirier, Gayle and Susan Hocker. "Teaching Critical Thinking in a Library Credit Course." Research Strategies 11(4) (Fall 1993): 233-241.
- Puttapithakporn, Somporn. "Interface Design and User Problems and Errors: A Case Study of Novice Searchers." RQ 30(2) (Winter 1990): 195-204.
- Quint, Barbara. "The Seven Stages of an Online Search -- Part 1." Online 15(3) (May 1991): 13-18.

- \_\_\_\_\_. "Inside a Searcher's Mind: The Seven Stages of an Online Search -- Part 2." Online 15(4) (July 1991): 28-35.
- Rader, Hannelore and William Coons. "Information Literacy: One Response to the New Decade." In The Evolving Educational Mission of the Library, edited by Betsy Baker and Beth Sandore, 109-127. Chicago: ACRL, American Library Association, 1992.
- Raimondo, Paula G. "CD-ROM Teaching Techniques: Instructing PsycLIT Users in a Health Sciences Library." Chapter 10 in Public Access CD-ROMs in Libraries: Case Studies, edited by Linda Stewart, Katherine S. Chiang, and Bill Coons, 135-145. Westport, CT and London: Meckler Corporation, 1990.
- Reichel, Mary. "Library Literacy." RQ 28(1) (Fall 1988): 29-32.
- Rice, James. "The Effect of End-User Searching on the Role of the Reference Librarian." Convergence: Proceedings of the Second National Conference of the Library and Information Technology Association, edited by Michael Gorman, 106-111. Chicago: American Library Association, 1990.
- Ridgeway, Trish. "Integrating Active Learning Techniques into the One-Hour Bibliographic Instruction Lecture." In Coping With Information Illiteracy: Bibliographic Instruction for the Information Age, edited by Glenn E. Mensching, Jr. and Teresa B. Mensching, 33-42. Ann Arbor, Michigan: Pierian Press, 1989.
- Robertson, Ivan T. "Human Information-Processing Strategies and Style." Behavior and Information Technology 4(1) (1985): 19-29.
- Rubens, Donna. "Formulation Rules for Posing Good Subject Questions: Empowerment for the End-User." Library Trends 39(3) (Winter 1991): 271-298.
- Rubens, Donna and Mary M. Huston. "Thinking Like a Searcher." In Building on the First Century, edited by Janice C. Fennell, 337-342. Chicago: ACRL, American Library Association, 1989.
- Rudd, Joel and Mary Jo Rudd. "Coping with Information Load: User Strategies and Implications for Librarians." College and Research Libraries 47(4) (July 1986): 315-322.
- Ruiz, Den and Daniel E. Meyer. "End-User Selection of Databases -- Part III: Social Science/Arts & Humanities." Database 13(5) (October 1990): 59-64.
- Salomon, Kristine. "The Impact of CD-ROM on Reference Departments." RQ 28(2) (Winter 1988): 203-215.



Sandore, Beth. "Applying the Results of Transaction Log Analysis." Library Hi Tech 11(2) (1993): 87-97.

\_\_\_\_\_. "Online Searching: What Measure Satisfaction?" Library and Information Science Research 12 (1990): 33-54.

Sandore, Beth and Betsy Baker. "Teaching the Online Catalogue: A New Era of Information Retrieval." In User Education in Academic Libraries, edited by Hugh Fleming, 165-190. London: The Library Association, 1990.

Saracevic, Tefko. "Cognitive Patterns in Online Searching." In Information Seeking: Basing Services on Users' Behaviors, edited by Jana Varlejs, 24-39. Jefferson, NC: McFarland & Company, Inc., 1987.

\_\_\_\_\_. "Individual Differences in Organizing, Searching and Retrieving Information." ASIS '91: Proceedings of the ASIS Annual Meeting 28 (1991): 82-86.

\_\_\_\_\_. "Modeling and Measuring User-Intermediary-Computer Interaction in Online Searching: Design of a Study." ASIS '89: Proceedings of the ASIS Annual Meeting 26 (1989): 75-80.

Saracevic, Tefko, Hartmut Mokros, and Louise Su. "Nature of Interaction Between Users and Intermediaries in Online Searching: A Qualitative Analysis." ASIS '90: Proceedings of the ASIS Annual Meeting 27 (1990): 47-54.

Saracevic, Tefko and Paul Kantor. "Online Searching: Still an Imprecise Art." Library Journal 116(16) (October 1, 1991): 47-51.

Saracevic, Tefko, Paul Kantor, Alice Y. Chamis, and Donna Trivison. "A Study of Information Seeking and Retrieving. I. Background and Methodology." Journal of the American Society for Information Science 39(3) (May 1988): 161-176.

Saracevic, Tefko and Paul Kantor. "A Study of Information Seeking and Retrieving. II. Users, Questions, and Effectiveness." Journal of the American Society for Information Science 39(3) (May 1988): 177-196.

Saracevic, Tefko and Paul Kantor. "A Study of Information Seeking and Retrieving. III. Searchers, Searches, and Overlap." Journal of the American Society for Information Science 39(3) (May 1988): 197-216.

Sasse, Martina-Angela. "How to T(r)ap Users' Mental Models." In Mental Models and Human-Computer Interaction 2, edited by M. J. Tauber and D. Ackermann, 59-79. Amsterdam, New York, Oxford: North-Holland Publishing Co., 1991.

- Saule, Mara R. "Teaching for Library Technologies." Chapter 1 in Teaching Technologies in Libraries: A Practical Guide, edited by Linda Brew MacDonald, Mara R. Saule, Margaret W. Gordon, and Craig A. Robertson, 1-27. Boston, Massachusetts: G. K. Hall & Co., 1990.
- Schamber, Linda, Michael B. Eisenberg, and Michael S. Nilan. "A Re-examination of Relevance: Toward a Dynamic, Situational Definition." Information Processing and Management 26(6) (1990): 755-776.
- Schmalhofer, Franz and Otto Kuhn. "The Psychological Processes of Constructing a Mental Model when Learning by Being Told, From Examples, and by Exploration." In Mental Models and Human-Computer Interaction 2, edited by M. J. Tauber and D. Ackermann, 337-360. Amsterdam, New York, Oxford: North-Holland Publishing Co., 1991.
- Schultz, Kim and Kristine Salomon. "End-Users Respond to CD-ROM." Library Journal 115(2) (February 1, 1990): 56-57.
- Seago, Brenda L. and Frank M. Campbell. "A Comparison of MEDLINE CD-ROM and Librarian-Mediated Search Service Users." Bulletin of the Medical Library Association 81(1) (January 1993): 63-66.
- Sein, Maung, Robert P. Bostrom, and Lorne Olfman. "Conceptual Models in Training Novice Users." In Human-Computer Interaction--INTERACT '87, edited by H.-J. Bullinger and B. Shackel, 861-867. Amsterdam, New York, and Oxford: North-Holland Publishing Company, 1987.
- Sein, Maung K. and Robert P. Bostrom. "Individual Differences and Conceptual Models in Training Novice Users." Human-Computer Interaction 4 (1989): 197-229.
- Sewell, Winifred and Sandra Teitelbaum. "Observations of End-User Online Searching Behavior over Eleven Years." Journal of the American Society for Information Science 37(4) (July 1986): 234-245.
- Shaw, Debora. "The Human-Computer Interface for Information Retrieval." Annual Review of Information Science and Technology (ARIST) 26 (1991): 155-195.
- Shaw, Debora, ed. ASIS '92: Proceedings of the 55th ASIS Annual Meeting Held in Pittsburgh, Pennsylvania 26-29 October 1992. Medford, NJ: Published for the American Society for Information Science by Learned Information, Inc., 1992.
- Shenouda, Wagih. "Online Bibliographic Searching: How End-Users Modify Their Search Strategies." ASIS '90: Proceedings of the ASIS Annual Meeting 27 (1990): 117-128.



- Sherratt, Christine S. and Martin L. Schlabach. "The Applications of Concept Mapping in Reference and Information Services." RQ 30(?) (Fall 1990): 60-69.
- Shipman, Barbara L., Diane G. Schwartz and Sandra C. Dow. "End-User Searching and New Roles for Librarians." Medical Reference Services Quarterly 11(3) (Fall 1992): 1-16.
- Shirato, Linda, ed. Judging the Validity of Information Sources: Teaching Critical Analysis in Bibliographic Instruction. Papers Presented at the Eighteenth National LOEX Library Instruction Conference Held at Eastern Michigan University 11-12 May 1990. (Library Orientation Series, No. 21). Ann Arbor, Michigan: Published for Learning Resources and Technologies, Eastern Michigan University, by Pierian Press, 1991.
- Shirato, Linda, ed. What is Good Instruction Now?: Library Instruction for the 90s. Papers Presented at the Twentieth National LOEX Library Instruction Conference Held at Eastern Michigan University 8-9 May 1992. (Library Orientation Series, No. 23). Ann Arbor, Michigan: Published for Learning Resources and Technologies, Eastern Michigan University, by Pierian Press, 1993.
- Shirato, Linda, ed. Working with Faculty in the New Electronic Library: Papers Presented at the Nineteenth National LOEX Library Instruction Conference Held at Eastern Michigan University 10-11 May 1991. (Library Orientation Series, No. 22). Ann Arbor, Michigan: Published for Learning Resources and Technologies, Eastern Michigan University, by Pierian Press, 1992.
- Shuell, Thomas J. "Cognitive Conceptions of Learning." Review of Educational Research 56(4) (Winter 1986): 411-436.
- Shuman, Bruce A. "One False Drop Deserves Another: File Selection as a Means of Increasing Precision in Online Searches." In 13th National Online Meeting Proceedings -- 1992, compiled by Martha E. Williams, 345-350. Medford, NJ: Learned Information, Inc., 1992.
- Small, Ruth V. and Barbara L. Grabowski. "An Exploratory Study of Information-Seeking Behaviors and Learning with Hypermedia Information Systems." Journal of Educational Media and Hypermedia 1(4) (1992): 445-464.
- Smith, Doris A. "Innovations in Education and Training." 13th National Online Meeting Proceedings -- 1992, compiled by Martha E. Williams, 359-362. Medford, NJ: Learned Information, Inc., 1992.
- Smith, Elizabeth. "Applying Cognitive Methods to Bibliographic Instruction." In Building on the First Century, edited by Janice C. Fennell, 170-177. Chicago: ACRL, American Library Association, 1989.

- Smith, Elizabeth S. "Relevance Judgments in Computer Searching." In Academic Libraries: Achieving Excellence in Higher Education, edited by Thomas Kirk, 356-366. Chicago: ACRL, American Library Association, 1992.
- Solomon, Paul. "On the Dynamics of Information System Use: From Novice to ?" ASIS '92: Proceedings of the ASIS Annual Meeting 29 (1992): 162-169.
- Spink, Amanda and Colleen Cool. "Recognition of Stages in the User's Information-Seeking Process During Online Searching by Novice Searchers." Online Review 16(5) (1992): 297-301.
- Spink, Amanda and Tefko Saracevic. "Sources and Use of Search Terms in Online Searching." ASIS '92: Proceedings of the ASIS Annual Meeting 29 (1992): 249-255.
- Spink, Amanda and Tefko Saracevic. "Where Do the Search Terms Come From?" 13th National Online Meeting Proceedings -- 1992, compiled by Martha E. Williams, 363-373. Medford, NJ: Learned Information, Inc., 1992.
- Steffen, Susan Swords. "Faculty as End-Users: Strategies, Challenges, and Rewards." In Bibliographic Instruction and Computer Database Searching, edited by Teresa B. Mensching and Keith J. Stanger, 17-21. Ann Arbor, Michigan: Pierian Press, 1988.
- Stewart, Linda. "Helping Students During Online Searches: An Evaluation." Journal of Academic Librarianship 18(6) (January 1993): 347-351.
- Stewart, Linda, Katherine S. Chiang, and Bill Coons, eds. Public Access CD-ROMS in Libraries: Case Studies. Westport, CT and London: Meckler Corporation, 1990.
- Stoan, Stephen K. "Research and Information Retrieval Among Academic Researchers: Implications for Library Instruction." Library Trends 39(3) (Winter 1991): 238-257.
- \_\_\_\_\_. "Research and Library Skills: An Analysis and Interpretation." College and Research Libraries 45(2) (March 1984): 99-109.
- Streitz, Norbert A., Will A. C. Spijkers, and Lidewij L. van Duren. "From Novice to Expert User: A Transfer of Learning Experiment on Different Interaction Modes." In Human-Computer Interaction--INTERACT '87, edited by H.-J. Bullinger and B. Shackel, 841-846. Amsterdam, New York, and Oxford: North-Holland Publishing Company, 1987.

- Sullivan, Michael, Christine L. Borgman, and Dorothy Wippen. "Bibliographic Searching by End-Users and Intermediaries: Front-End Software Vs. Native DIALOG Commands." ASIS '88: Proceedings of the ASIS Annual Meeting 25 (1988): 120-126.
- Sullivan, Michael, Christine L. Borgman and Dorothy Wippen. "End-Users, Mediated Searches, and Front-End Assistance Programs in DIALOG: A Comparison of Learning, Performance and Satisfaction." Journal of the American Society for Information Science 41(1) (1990): 27-42.
- Sullivan, Patricia and Peggy Seiden. "Educating Online Catalog Users: The Protocol Assessment of Needs." Library Hi Tech 10 (1985): 11-19.
- Tauber, M. J. and D. Ackermann, eds. Mental Models and Human-Computer Interaction 2. Amsterdam, New York, and Oxford: North-Holland Publishing Company, 1991.
- Taylor, Nancy and Sara Penhale. "End-User Searching and Bibliographic Instruction." In Bibliographic Instruction and Computer Database Searching, edited by Teresa B. Mensching and Keith J. Stanger, 57-74. Ann Arbor, Michigan: Pierian Press, 1988.
- Taylor, Robert S. "Information Use Environments." Progress in Communication Sciences 10 (1991): 217-255.
- Teitelbaum-Kronish, Priscilla. "Relationship of Selected Cognitive Aptitudes and Personality Characteristics of the Online Searcher to the Quality of Performance in Online Bibliographic Retrieval." Ph.D. Dissertation, New York University, 1984.
- Tenopir, Carol, Diane Nahl-Jakobovits and Dara Lee Howard. "Strategies and Assessments Online: Novices' Experience." Library and Information Science Research 13(3) (July- September 1991): 237-266.
- Torok, Andrew and Jitka Hurych. "End User Online Searching Among University Faculty." ASIS '86: Proceedings of the ASIS Annual Meeting 23 (1986): 335-340.
- Totten, Nancy T. "Teaching Students to Evaluate Information: A Justification." RQ 29(3) (Spring 1990): 348-354.
- Trivison, Donna, Alice Y. Chamis, Tefko Saracevic, and Paul Kantor. "Effectiveness and Efficiency of Searchers in Online Searching: Preliminary Results from a Study of Information Seeking and Retrieving." ASIS '86: Proceedings of the ASIS Annual Meeting 23 (1986): 341-349.

- Turner, Philip M., Neal K. Kaske, and Gayle S. Baker. "The Effects of Baud Rate, Performance Anxiety, and Experience on Online Bibliographic Searches." Information Technology and Libraries 9(1) (March 1990): 34-42.
- Valentine, Barbara. "Undergraduate Research Behavior: Using Focus Groups to Generate Theory." The Journal of Academic Librarianship 19(5) (November 1993): 300-304.
- Van Beek, Jan, Pieter Bëen, and Karel Hurts. "Computer-Based Learning for On-Line Data Base Search." Computers and Education 13(4) (1989): 327-336.
- Van Pulis, Noelle, and Lorene E. Ludy. "Subject Searching in an Online Catalog with Authority Control." College and Research Libraries 46(6) (November 1988): 523-533.
- Varlejs, Jana, ed. Information Seeking: Basing Services on Users' Behaviors. Jefferson, NC: McFarland & Company, Inc., 1987.
- Vigil, Peter J. "The Psychology of Online Searching." Journal of the American Society for Information Science 34(4) (July 1983): 281-287.
- Walker, Geraldene. "A Comparative Evaluation of End-User Search Performance in an Academic Environment." Ph.D. Dissertation, Syracuse University, 1988.
- \_\_\_\_\_. End-User Searching: A Selection of the Literature for 1983-1988. An ERIC Synthesis Paper. Washington, D.C.: Office of Educational Research and Improvement, 1988. ERIC, ED 308 877.
- \_\_\_\_\_. "Search Performance of Naive End-Users in an Academic Environment." In Convergence: Proceedings of the Second National Conference of the Library and Information Technology Association, edited by Michael Gorman, 112-118. Chicago: American Library Association, 1990.
- \_\_\_\_\_. "Searching the Humanities: Subject Overlap and Search Vocabulary." Database 13(5) (October 1990): 37-46.
- Wallace, Patricia M. "How Do Patrons Search the Online Catalog When No One's Looking? Transaction Log Analysis and Implications for Bibliographic Instruction and System Design." RQ 33(2) (Winter 1993): 239-252.
- Walton, Graham and Sarah Nettleton. "Reflective and Critical Thinking in User Education Programmes: Two Case Studies." British Journal of Academic Librarianship 7(1) (1992): 31-43.

- Ward, Sandra N. and Laura M. Osegueda. "Teaching University Student End-Users about Online Searching." In Serving End-Users in Sci-Tech Libraries, edited by Ellis Mount, 17-31. New York: Haworth Press, 1984.
- Warmkessel, Marjorie M. and Frances M. Carothers. "Collaborative Learning and Bibliographic Instruction." The Journal of Academic Librarianship 19(1) (March 1993): 4-7.
- Warner, Julian. "Retrieval Performance Tests in Relation to Online Bibliographic Searching." ASIS '92: Proceedings of the ASIS Annual Meeting 29 (1992): 231-241.
- Weinberg, Bella H. "Why Indexing Fails the Researcher." ASIS '87: Proceedings of the ASIS Annual Meeting 24 (1987): 241-244.
- Westbrook, Lynn. "User Needs: A Synthesis and Analysis of Current Theories for the Practitioner." RQ 32(4) (Summer 1993): 541-549.
- Westbrook, Lynn and Sharon DeDecker. "Supporting User Needs and Skills to Minimize Library Anxiety: Considerations for Academic Libraries." The Reference Librarian 19(40) (1993): 43-52.
- Wettler, Manfred and Angelika Glockner-Rist. "Cognitive Processes in Information Retrieval: Production Rules and Lexical Nets." In Mental Models and Human-Computer Interaction 2, edited by M. J. Tauber and D. Ackermann, 243-255. Amsterdam, New York, Oxford: North-Holland Publishing Co., 1991.
- White, Herbert S. "The Reference Librarian as Information Intermediary: The Correct Approach Is the One That Today's Client Needs Today." In The Reference Librarian and Implications of Mediation, edited by M. Keith Ewing and Robert Hauptman, 23-35. Binghamton, NY: Haworth Press, 1992.
- Wiberly, Stephen E., Jr. "Subject Access in the Humanities and the Precision of the Humanist's Vocabulary." Library Quarterly 53(4) (1992): 420-433.
- Wiberly, Stephen E., Jr. and Robert Allen Daugherty. "Users' Persistence in Scanning Lists of References." College and Research Libraries 49(2) (March 1988): 149-156.
- Wildemuth, Barbara M. "Measures of Success in Searching a Full-Text Fact Base." ASIS '90: Proceedings of the ASIS Annual Meeting 27 (1990): 104-109.
- Wildemuth, Barbara M., Elin K. Jacob, Angela Fullington, Ruth de Bliet, and Charles Friedman. "A Detailed Analysis of End-User Search Behaviors." ASIS '91: Proceedings of the ASIS Annual Meeting 28 (1991): 302-312.

- Wildemuth, Barbara M., Ruth de Blik, Shaoyi He, and Charles Friedman. "Search Moves Made by Novice End Users." ASIS '92: Proceedings of the ASIS Annual Meeting 29 (1992): 154-161.
- Williams, Karen, Janet S. Fore, and John M. Budd. "Cognitive Processes of Reference Librarians." Chapter 5 in Research in Reference Effectiveness, edited by Marjorie E. Murfin and Jo Bell Whitlach, 68-83. Chicago: RASD, American Library Association, 1993.
- Williams, Martha E., compiler. Proceedings of the 13th National Online Meeting Held in New York, New York 5-7 May 1992. Medford, NJ: Learned Information, Inc., 1992.
- Williamson, Nancy J. "Subject Access in the On-Line Environment." Advances in Librarianship 13 (1984): 49-97.
- Wilson, Thomas D. "The Cognitive Approach to Information Seeking Behaviour and Information Use." Social Science Information Studies 4 (1984): 197-204.
- Woelfl, Nancy N. "Individual Differences in Online Bibliographic Searching: The Effect of Learning Styles and Cognitive Abilities on Process and Outcome." Ph.D. Dissertation, Case Western Reserve University, 1984.
- Wormell, Irene. "Cognitive Aspects in Natural Language and Free-Text Searching." Social Science Information Studies 4(2/3) (April/July 1984): 131-141.
- Wormell, Irene, ed. Knowledge Engineering: Expert Systems and Information Retrieval. London and Los Angeles: Taylor Graham, 1987.
- Wozny, Lucy Anne. "College Students as End User Searchers: One University's Experience." RQ 28(1) (Fall 1988): 54-61.
- Wyman, Andrea. "Learning Style: Its Place in Library Instruction." In Building on the First Century, edited by Janice C. Fennell, 178-185. Chicago: ACRL, American Library Association, 1989.
- Yee, Sandra G. "Information Literacy Skills: How Students Learn Them and Why." In Coping with Information Illiteracy: Bibliographic Instruction for the Information Age, edited by Glenn E. Mensching, Jr. and Teresa B. Mensching, 43-59. Ann Arbor, Michigan: Pierian Press, 1989.
- Yoo, Jae-Ok. "Field Dependence/Independence and the Performance of the Online Searcher." Ph.D. Dissertation, Indiana University, 1990.

Zaroukian, Michael H., James J. Haf, and Mary A. Alfano. "MEDLINE Computerized Literature Searching Using GRATEFUL MED: A Pilot Instructional Project for Entering Medical Students." Teaching and Learning in Medicine 2(4) (1990): 205-211.

## SUBJECT LISTING OF REFERENCES

### I. Information Seeking Behavior

#### I.A. Information Needs

- Allen, Bryce (1990). "Effects of Academic Background on Statements of Information Need."
- Dervin, Brenda and Michael Nilan (1986). "Information Needs and Uses."
- Dervin, Brenda and Patricia Dewdney (1986). "Neutral Questioning: A New Approach to the Reference Interview."
- Ford, Nigel (1986). "Psychological Determinants of Information Needs: A Small-Scale Study of Higher Education Students."
- Hewins, Elizabeth T. (1990). "Information Need and Use Studies."
- Horne, Esther E. (1990). "An Investigation into Self-Questioning Behavior During Problem-Solving."
- Krikelas, James (1983). "Information-Seeking Behavior: Patterns and Concepts."
- Metoyer-Duran, Cheryl (1993). "Information Gatekeepers."
- Palmquist, Ruth A. and George M. Sinkankas (1991). "Client Needs Without Clients: Can We Understand Information Needs Without Clients Present to Explain Them?"
- Palmquist, Ruth A. and Pradeep Singh (1987). "Testing the Importance of a Simple Thesaurus Enhancement for a Natural Language Statement of an Information Need."
- Palmquist, Ruth A. and Bhaskaran Balakrishnan (1988). "Using a Continuous Word Association Test to Enhance a User's Description of an Information Need: A Quasi-Experimental Study."
- Taylor, Robert S. (1991). "Information Use Environments."
- Westbrook, Lynn (1993). "User Needs: A Synthesis and Analysis of Current Theories for the Practitioner."



## **I.B. The Research Process**

Fister, Barbara (1992). "The Research Processes of Undergraduate Students."

Ford, Nigel (1987). "Research and Practice in Librarianship: A Cognitive View."

Miller, Connie and Patricia Tegler (1986). "Online Searching and the Research Process."

Stoan, Stephen K. (1991). "Research and Information Retrieval Among Academic Researchers: Implications for Library Instruction."

Stoan, Stephen K. (1984). "Research and Library Skills: An Analysis and Interpretation."

Valentine, Barbara (1993). "Undergraduate Research Behavior: Using Focus Groups to Generate Theory."

## I.C. The Search Process

- Bartolo, Laura M. and Timothy D. Smith (1993). "Interdisciplinary Work and the Information Search Process: A Comparison of Manual and Online Searching."
- Brown, Mary E. (1991). "A General Model of Information Seeking Behavior."
- Fenichel, Carol H. (1980). "The Process of Online Bibliographic Searching: A Review of the Research."
- Hert, Carol A. (1992). "Exploring a New Model for Understanding Information Retrieval Interactions."
- Hewett, Thomas T. and Sari Scott (1987). "The Use of Thinking-out-loud and Protocol Analysis in Development of a Process Model of Interactive Database Searching."
- Huston, Mary M. (1991). "Windows into the Search Process: An Inquiry into Dimensions of Online Information Retrieval."
- King, David and Betsy Baker (1988). "Teaching End-Users to Search: Issues and Problems."
- Krikelas, James (1983). "Information-Seeking Behavior: Patterns and Concepts."
- Kuhlthau, Carol C. (1990). "The Information Search Process: From Theory to Practice."
- Kuhlthau, Carol C. (1991). "Inside the Search Process: Information Seeking from the User's Perspective."
- Kuhlthau, Carol C. (1988). "Longitudinal Case Studies of the Information Search Process of Users in Libraries."
- Kuhlthau, Carol C. (1991). "The Process Approach to Bibliographic Instruction: An Examination of the Search Process in Preparation for Writing the Research Paper."
- Kuhlthau, Carol C. and others (1989). "Facilitating Information Seeking through Cognitive Modeling of the Search Process: A Library Studies Research Project."
- Kuhlthau, Carol C. and others (1988). "Facilitating Information Seeking through Cognitive Models of the Search Process."
- Kuhlthau, Carol C. and others (1989). "Flowcharting the Information Search: A Method of Eliciting Users' Mental Maps."

Moody, Marilyn K. (1991). "Documents Search Strategies and General Reference Search Strategies: An Analysis and Comparison."

Rubens, Donna (1991). "Formulation Rules for Posing Good Subject Questions: Empowerment for the End-User."

Rubens, Donna and Mary M. Huston (1989). "Thinking Like a Searcher."

### **I.C.1. Search Stages**

Kuhlthau, Carol C. (1988). "Developing a Model of the Library Search Process: Cognitive and Affective Aspects."

Kuhlthau, Carol C. (1990). "Inside the Search Process: Information Seeking from the User's Perspective."

Kuhlthau, Carol C. (1988). "Longitudinal Case Studies of the Information Search Process of Users in Libraries."

Kuhlthau, Carol C. and others (1992). "Exploration into Stages in the Information Search Process in Online Information Retrieval: Communication Between Users and Intermediaries."

Marchionini, Gary and others (1993). "Information Seeking in Full-Text End-User Oriented Search Systems: The Roles of Domain and Search Expertise."

Quint, Barbara (1991). "The Seven Stages of an Online Search -- Part 1."

Quint, Barbara (1991). "Inside a Searcher's Mind: The Seven Stages of an Online Search -- Part 2."

Spink, Amanda and Colleen Cool (1992). "Recognition of Stages in the User's Information-Seeking Process During Online Searching by Novice Searchers."

Wildemuth, Barbara M. and others (1991). "A Detailed Analysis of End-User Search Behaviors."

## I.C.2. Database Selection

Allen, Gillian (1990). "Database Selection by Patrons Using CD-ROM."

Meyer, Daniel E. and Den Ruiz (1990). "End-User Selection of Databases -- Part I: Science/Technology/Medicine."

Ruiz, Den and Daniel E. Meyer (1990). "End-User Selection of Databases -- Part III: Social Sciences/Arts & Humanities."

Shuman, Bruce A. (1992). "One False Drop Deserves Another: File Selection as a Means of Increasing Precision in Online Searches."

**I.C.3. Search Terms**  
(Controlled Vocabulary, Free-Text, Natural Language)

- Brundage, Christina A. (1989). "Teaching Controlled Vocabulary and Natural Language to End-Users of Scientific Online and CD-ROM Databases."
- Cherry, Joan M. (1992). "Improving Subject Access in OPACs: An Exploratory Study of Conversion of Users' Queries."
- Fidel, Raya (1987). "Controlled Vocabulary and Free-Text Searching: Searchers' Selection of Search Keys."
- Fidel, Raya (1988). "Extracting Knowledge for Intermediary Expert Systems: The Selection of Search Keys."
- Fidel, Raya (1988). "Factors Affecting the Selection of Search Keys."
- Fidel, Raya (1991). "Searchers' Selection of Search Keys:"  
"I. The Selection Routine."  
"II. Controlled Vocabulary or Free-Text Searching."  
"III. Searching Styles."
- Palmquist, Ruth A. and George M. Sinkankas (1991). "Client Needs Without Clients: Can We Understand Information Needs Without Clients Present to Explain Them?"
- Palmquist, Ruth A. and Pradeep Singh (1987). "Testing the Importance of a Simple Thesaurus Enhancement for a Natural Language Statement of an Information Need."
- Palmquist, Ruth A. and Bhaskaran Balakrishnan (1988). "Using a Continuous Word Association Test to Enhance a User's Description of an Information Need: A Quasi-Experimental Study."
- Spink, Amanda and Tefko Saracevic (1992). "Sources and Use of Search Terms in Online Searching."
- Spink, Amanda and Tefko Saracevic (1992). "Where Do the Search Terms Come From?"
- Van Pulis, Noelle and Lorene E. Ludy (1988). "Subject Searching in an Online Catalog with Authority Control."
- Walker, Geraldene (1990). "Searching the Humanities: Subject Overlap and Search Vocabulary."

Weinberg, Bella H. (1987). "Why Indexing Fails the Researcher."

Wiberly, Stephen E., Jr. (1993). "Subject Access in the Humanities and the Precision of the Humanist's Vocabulary."

Williamson, Nancy J. (1984). "Subject Access in the Online Environment."

Wormell, Irene (1984). "Cognitive Aspects in Natural Language and Free-Text Searching."



#### I.C.4. Search Strategy, Retrieval Techniques

- Bates, Marcia J. (1989). "The Design of Browsing and Berrypicking Techniques for the Online Search Interface."
- Bates, Marcia J. (1984). "The Fallacy of the Perfect Thirty-Item Online Search."
- Belkin, Nicholas (1987). "Retrieval Techniques."
- Charles, Susan K. and Katharine E. Clark (1990). "Enhancing CD-ROM Searches with Online Updates: An Examination of End-User Needs, Strategies, and Problems."
- Dalrymple, Prudence W. (1990). "Retrieval by Reformulation in Two Library Catalogs: Toward a Cognitive Model of Searching Behavior."
- Greene, Sharon L. and others (1990). "No IFs, ANDs, or ORs: A Study of Database Querying."
- Moody, Marilyn K. (1991). "Documents Search Strategies and General Reference Search Strategies: An Analysis and Comparison."
- Shenouda, Wagih (1990). "Online Bibliographic Searching: How End-Users Modify Their Search Strategies."
- Tenopir, Carol and others (1991). "Strategies and Assessments Online: Novices' Experience."
- Wildemuth, Barbara and others (1991). "A Detailed Analysis of End-User Search Behaviors."
- Wildemuth, Barbara and others (1992). "Search Moves Made by Novice End-Users."

**I.C.5. Evaluating Relevance, Selecting Sources,  
Information Overload**

- Eisenberg, Michael and Linda Schamber (1988). "Relevance: The Search for a Definition."
- Engeldinger, Eugene A. (1988). "Bibliographic Instruction and Critical Thinking: The Contribution of the Annotated Bibliography."
- Halpern, David and Michael S. Nilan (1988). "A Step Toward Shifting the Research Emphasis in Information Science From the System to the User: An Empirical Investigation of Source-Evaluation Behavior in Information Seeking and Use."
- Hjorland, B. (1984). "Psychology and Information Search Strategy: 'Information Input Overload.'"
- Jacobson, Trudi E. and Lynne M. Martin (1993). "Merging Critical Thinking and the Electronic Library: A Visionary Perspective of SuperPAC, an Enhanced OPAC."
- Nash, Stan and Myoung C. Wilson (1991). "Value-Added Bibliographic Instruction: Teaching Students to Find the Right Citations."
- Nilan, Michael S. and others (1988). "A Methodology for Tapping User Evaluation Behaviors: An Exploration of Users' Strategy, Source and Information Evaluating."
- Rudd, Joel and Mary Jo Rudd (1986). "Coping with Information Load: User Strategies and Implications for Librarians."
- Saracevic, Tefko (1991). "Individual Differences in Organizing, Searching and Retrieving Information."
- Schamber, Linda and others (1990). "Re-examination of Relevance: Toward a Dynamic, Situational Definition."
- Smith, Elizabeth S. (1992). "Relevance Judgments in Computer Searching."
- Totten, Nancy T. (1990). "Teaching Students to Evaluate Information: A Justification."
- Wiberly, Stephen E., Jr. and Robert Allen Daugherty (1988). "Users' Persistence in Scanning Lists of References."

**I.D. Retrieval Performance, Search Outcome**  
(Success, Failure, User Satisfaction, User Problems)

- Allen, Bryce (1993). "Logical Reasoning and Retrieval Performance."
- Allen, Gillian (1989). "Patron Response to Bibliographic Databases on CD-ROM."
- Ankeny, Melvon L. (1991). "Evaluating End-User Services: Success or Satisfaction?"
- Balaraman, Kamala (1991). "End-User Studies in CD-ROM Environment: Work in Progress."
- Bates, Marcia J. (1984). "The Fallacy of the Perfect Thirty-Item Online Search."
- Beck, Susan J. (1991). "Information Specialists' Use of Machine-Assisted Reference Tools: Evaluation Criteria."
- Bellardo, Trudi (1985). "An Investigation of Online Searcher Traits and Their Relationship to Search Outcome."
- Bellardo, Trudi and Tefko Saracevic (1987). "Online Searching and Search Output: Relationships Between Overlap, Relevance, Recall and Precision."
- Borgman, Christine L. (1983). "Psychological Factors in Online Catalog Use, or Why Users Fail."
- Borgman, Christine L. (1984). "The User's Mental Model of an Information Retrieval System: Effects on Performance."
- Borgman, Christine L. (1986). "Why Are Online Catalogs Hard to Use? Lessons Learned from Information-Retrieval Studies."
- Cameron, Lynn and James Hart (1992). "Assessment of PsycLIT Competence, Attitudes, and Instructional Methods."
- Charles, Susan K. and Katharine E. Clark (1990). "Enhancing CD-ROM Searches with Online Updates: An Examination of End-User Needs, Strategies, and Problems."
- Cheney, Debora (1991). "Evaluation-Based Training: Improving the Quality of End-User Searching."
- Culbertson, Michael (1992). "Analysis of Searches by End-Users of Science and Engineering CD-ROM Databases in an Academic Library."

- Dimitroff, Alexandra (1992). "Mental Models Theory and Search Outcome in a Bibliographic Retrieval System."
- Fenichel, Carol H. (1981). "Online Searching: Measures that Discriminate Among Users with Different Types of Experience."
- Hunter, Rhonda N. (1991). "Successes and Failures of Patrons Searching the Online Catalog at a Large Academic Library: A Transaction Log Analysis."
- Jacobson, Thomas and David Fusani (1992). "Computer, System, and Subject Knowledge in Novice Searching of a Full-Text, Multifile Database."
- Kalin, Sally W. (1991). "The Searching Behavior of Remote Users: A Study of One Online Public Access Catalog (OPAC)."
- Littlejohn, Alice C. (1987). "End-User Searching in an Academic Library -- The Students' View."
- Penhale, Sara J. and Nancy Taylor (1986). "Integrating End-User Searching into a Bibliographic Instruction Program."
- Peters, Thomas A. (1989). "When Smart People Fail: An Analysis of the Transaction Log of an Online Public Access Catalog."
- Puttapithakporn, Somporn (1990). "Interface Design and User Problems and Errors: A Case Study of Novice Searchers."
- Sandore, Beth (1990). "Online Searching: What Measure Satisfaction?"
- Saracevic, Tefko (1991). "Individual Differences in Organizing, Searching and Retrieving Information."
- Saracevic, Tefko and Paul Kantor (1991). "Online Searching: Still an Imprecise Art."
- Saracevic, Tefko and Paul Kantor (1988). "A Study of Information Seeking and Retrieving."  
 II. "Users, Questions, and Effectiveness."  
 III. "Searchers, Searches, and Overlap."
- Sullivan, Michael and others (1990). "End-Users, Mediated Searches, and Front-End Assistance Programs in DIALOG: A Comparison of Learning, Performance and Satisfaction."
- Sullivan, Patricia and Peggy Seiden (1985). "Educating Online Catalog Users. The Protocol Assessment of Needs."

- Teitelbaum-Kronish, Priscilla (1984). "Relationship of Selected Cognitive Aptitudes and Personality Characteristics of the Online Searcher to the Quality of Performance in Online Bibliographic Retrieval."
- Trivison, Donna and others (1986). "Effectiveness and Efficiency of Searchers in Online Searching: Preliminary Results from a Study of Information Seeking and Retrieving."
- Walker, Geraldene (1988). "A Comparative Evaluation of End-User Search Performance in an Academic Environment."
- Walker, Geraldene (1988). End-User Searching: A Selection of the Literature for 1983-1988. An ERIC Synthesis Paper.
- Walker, Geraldene (1990). "Search Performance of Naive End-Users in an Academic Environment."
- Warner, Julian (1992). "Retrieval Performance Tests in Relation to Online Bibliographic Searching."
- Wildemuth, Barbara M. (1990). "Measures of Success in Searching a Full-Text Fact Base."
- Wozny, Lucy Anne (1988). "College Students as End User Searchers: One University's Experience."
- Yoo, Jae-Ok (1990). Field Dependence/Independence and the Performance of the Online Searcher.

## **II. Psychological Aspects of Information Seeking Behavior**

### **II.A. Psychological Theories and Research Methods Used in Information Seeking Behavior Studies**

Borgman, Christine L. (1983). "Psychological Factors in Online Catalog Use, or Why Users Fail."

Borgman, Christine L. (1984). "Psychological Research in Human-Computer Interaction."

Dervin, Brenda (1992). "From the Mind's Eye of the User: The Sense-Making Qualitative-Quantitative Methodology."

Dillon, Andrew (1987). "A Psychological View of User-Friendliness."

Dunn, Kathleen (1986). "Psychological Needs and Source Linkages in Undergraduate Information-Seeking Behavior."

Fenichel, Carol H. (1980). "The Process of Searching Online Bibliographic Databases: A Review of the Research."

Fine, Sara (1984). "Research and the Psychology of Information Use."

Ford, Nigel (1986). "Psychological Determinants of Information Needs: A Small-Scale Study of Higher Education Students."

Glazier, Jack D. (1992). "Qualitative Research Methodologies for Library and Information Science: An Introduction."

Halpern, David and Michael S. Nilan (1988). "A Step Toward Shifting the Research Emphasis in Information Science From the System to the User: An Empirical Investigation of Source-Evaluation Behavior in Information Seeking and Use."

Hatchard, Dennis B. and Christine Crocker (1990). "Library Users: A Psychological Profile."

Hjorland, B. (1984). "Psychology and Information Search Strategy: 'Information Input Overload.'"

Ingwersen, Peter (1984). "Psychological Aspects of Information Retrieval."

Keefer, Jane (1993). "The Hungry Rats Syndrome: Library Anxiety, Information Literacy, and the Academic Reference Process."

- Nahl-Jakobovits, Diane and Leon A. Jakobovits (1988). "Problem-Solving, Creative Librarianship, and Search Behavior."
- Sandore, Beth (1993). "Applying the Results of Transaction Log Analysis."
- Saracevic, Tefko and others (1988). "A Study of Information Seeking and Retrieving. I. Background and Methodology."
- Valentine, Barbara (1993). "Undergraduate Research Behavior: Using Focus Groups to Generate Theory."
- Vigil, Peter J. (1983). "The Psychology of Online Searching."
- Wallace, Patricia M. (1993). "How Do Patrons Search the Online Catalog When No One's Looking? Transaction Log Analysis and Implications for Bibliographic Instruction and System Design "



## **II.B. Affective Factors, Anxiety**

- Bostick, Sharon L. (1993). "The Development and Validation of the Library Anxiety Scale."
- Collins, Bobbie L. and others (1987). "The Needs and Feelings of Beginning Researchers."
- Dalrymple, Prudence W. and Douglas L. Zweizig (1992). "Users' Experience of Information Retrieval Systems: An Exploration of the Relationship Between Search Experience and Affective Measures."
- Egan, Philip J. (1992). "Bridging the Gap Between the Student and the Library."
- Jakobovits, Leon A. and Diane Nahl-Jakobovits (1990). "Measuring Information Searching Competence."
- Keefer, Jane (1993). "The Hungry Rats Syndrome: Library Anxiety, Information Literacy, and the Academic Reference Process."
- Kuhlthau, Carol C. (1988). "Developing a Model of the Library Search Process: Cognitive and Affective Aspects."
- Kuhlthau, Carol C. (1991). "Inside the Search Process: Information Seeking from the User's Perspective."
- Kupersmith, John (1992). "Technostress and the Reference Librarian."
- Mellon, Constance A. (1988). "Attitudes: The Forgotten Dimension in Library Instruction."
- Mellon, Constance A. (1986). "Library Anxiety: A Grounded Theory and Its Development."
- Mellon, Constance A. (1989). "Library Anxiety and the Non-Traditional Student."
- Miericke, Susan (1991). "Creating Hospitable Environments for Technologically Naive Users: Y'all Come Back Now, Hear!"
- Nahl-Jakobovits, Diane and Leon A. Jakobovits (1993). "Bibliographic Instructional Design for Information Literacy: Integrating Affective and Cognitive Objectives."
- Small, Ruth V. and Barbara L. Grabowski (1992). "An Exploratory Study of Information-Seeking Behaviors and Learning with Hypermedia Information Systems."

- Tenopir, Carol and others (1991). "Strategies and Assessments Online: Novices' Experience."
- Turner, Philip M. and others (1990). "The Effects of Baud Rate, Performance Anxiety, and Experience on Online Bibliographic Searches."
- Valentine, Barbara (1993). "Undergraduate Research Behavior: Using Focus Groups to Generate Theory."
- Warmkessel, Marjorie M. and Frances M. Carothers (1993). "Collaborative Learning and Bibliographic Instruction."
- Westbrook, Lynn (1993). "User Needs: A Synthesis and Analysis of Current Theories for the Practitioner."
- Westbrook, Lynn and Sharon DeDecker (1993). "Supporting User Needs and Skills to Minimize Library Anxiety: Considerations for Academic Libraries."

## **II.C. Cognitive Factors**

- Allen, Bryce (1992). "Cognitive Differences in End User Searching of a CD-ROM Index."
- Allen, Bryce (1991). "Cognitive Research in Information Science: Implications for Design."
- Allen, Bryce (1993). "Logical Reasoning and Retrieval Performance."
- Allen, Bryce and Gillian Allen (1993). "Cognitive Abilities of Academic Librarians and Their Patrons."
- Belkin, Nicholas J. (1984). "Cognitive Models and Information Transfer."
- Belkin, Nicholas J. (1990). "The Cognitive Viewpoint in Information Science."
- Brown, Mary E. (1991). "Design for a Bibliographic Database for Non-Professional Users."
- Carroll, John M., ed. (1987). Interfacing Thought: Cognitive Aspects of Human-Computer Interaction.
- Dalrymple, Prudence W. (1990). "Retrieval by Reformulation in Two Library Catalogs: Toward a Cognitive Model of Searching Behavior."
- Daniels, Penny J. (1986). "Cognitive Models in Information Retrieval: An Evaluative Review."
- Dervin, Brenda and Michael Nilan (1986). "Information Needs and Uses."
- Dillon, Andrew (1987). "A Psychological View of 'User-Friendliness.'"
- Eisenberg, Michael and Linda Schamber (1988). "Relevance: The Search for a Definition."
- Ellis, David (1992). "The Physical and Cognitive Paradigms in Information Research."
- Ford, Nigel (1987). "Research and Practice in Librarianship: A Cognitive View."
- Fowler, C. J. H. and D. Murray (1987). "Gender and Cognitive Style Differences at the Human-Computer Interface."
- Greene, Sharon L. and others (1990). "No IFs, ANDs, or ORs: A Study of Database Querying."

- Guthrie, John T. and others (1991). "Roles of Document Structure, Cognitive Strategy, and Awareness in Searching for Information."
- Hert, Carol A. (1992). "Exploring a New Model for Understanding Information Retrieval Interactions."
- Hert, Carol A. and Michael S. Nilan (1991). "User-Based Information Retrieval System Interface Evaluation: An Examination of an Online Public Access Catalog."
- Hollnagel, Erik (1987). "Cognitive Models, Cognitive Tasks, and Information Retrieval."
- Huston, Mary M. (1991). "Windows into the Search Process: An Inquiry into Dimensions of Online Information Retrieval."
- Ingwersen, Peter (1984). "Psychological Aspects of Information Retrieval."
- Ingwersen, Peter (1982). "Search Procedures in the Library -- Analysed from the Cognitive Point of View."
- Ingwersen, Peter (1987). "Towards a New Research Paradigm in Information Retrieval."
- Jakobovits, Leon A. and Diane Nahl-Jakobovits (1990). "Measuring Information Searching Competence."
- Johnson, Kerry and Marilyn D. White (1982). "The Cognitive Style of Information Professionals."
- Johnson, Kerry and Marilyn D. White (1982). "The Cognitive Style of Reference Librarians."
- Kuhlthau, Carol C. (1988). "Developing a Model of the Library Search Process: Cognitive and Affective Aspects."
- Kuhlthau, Carol C. (1991). "Inside the Search Process: Information Seeking from the User's Perspective."
- Kuhlthau, Carol C. and others (1989). "Facilitating Information Seeking through Cognitive Modeling of the Search Process: A Library Studies Research Project."
- Kuhlthau, Carol C. and others (1988). "Facilitating Information Seeking through Cognitive Models of the Search Process."

- Landauer, Thomas K. (1987). "Relations Between Cognitive Psychology and Computer System Design."
- Logan, Elisabeth (1990). "Cognitive Styles and Online Behavior of Novice Searchers."
- Logan, Elisabeth and Nancy N. Woelfl (1986). "Individual Differences in Online Searching Behavior of Novice Searchers."
- Moody, Marilyn K. (1991). "Documents Search Strategies and General Reference Search Strategies: An Analysis and Comparison."
- Robertson, Ivan T. (1985). "Human Information-Processing Strategies and Style."
- Rubens, Donna and Mary M. Huston (1989). "Thinking Like a Searcher."
- Sandore, Beth (1993). "Applying the Results of Transaction Log Analysis."
- Saracevic, Tefko (1987). "Cognitive Patterns in Online Searching."
- Small, Ruth V. and Barbara L. Grabowski (1992). "An Exploratory Study of Information-Seeking Behaviors and Learning with Hypermedia Information Systems."
- Teitelbaum-Kronish, Priscilla (1984). "Relationship of Selected Cognitive Aptitudes and Personality Characteristics of the Online Searcher to the Quality of Performance in Online Bibliographic Retrieval."
- Tenopir, Carol and others (1991). "Strategies and Assessments Online: Novices' Experience."
- Trivison, Donna and others (1986). "Effectiveness and Efficiency of Searchers in Online Searching: Preliminary Results from a Study of Information Seeking and Retrieving."
- Vigil, Peter J. (1983). "The Psychology of Online Searching."
- Westbrook, Lynn (1993). "User Needs: A Synthesis and Analysis of Current Theories for the Practitioner."
- Wettler, Manfred and Angelika Glockner-Rist (1991). "Cognitive Processes in Information Retrieval: Production Rules and Lexical Nets."
- Williams, Karen and others (1993). "Cognitive Processes of Reference Librarians."
- Wilson, Thomas D. (1984). "The Cognitive Approach to Information Seeking Behaviour and Information Use."

Woelfl, Nancy N. (1984). "Individual Differences in Online Bibliographic Searching: The Effect of Learning Styles and Cognitive Abilities on Process and Outcome."

Wormell, Irene (1984). "Cognitive Aspects in Natural Language and Free-Text Searching."

Yoo, Jae-Ok (1990). "Field Dependence/Independence and the Performance of the Online Searcher."

## II.D. User Needs, User Studies

- Belkin, Nicholas J. and others (1990). "Taking Account of User Tasks, Goals and Behavior for the Design of Online Public Access Catalogs."
- Bucknall, Tim and Rikki Mangrum (1992). "U-Search: A User Study of the CD-ROM Service at the University of North Carolina at Chapel Hill."
- Charles, Susan K. and Katharine E. Clark (1990). "Enhancing CD-ROM Searches with Online Updates: An Examination of End-User Needs, Strategies, and Problems."
- Cherry, Joan M. and Marshall Clinton (1989). "A Profile of User Background and User Satisfaction with the University of Toronto OPAC and the Implications for User Training and User Interfaces."
- Crooks, James E. (1992). "User Aspects of Electronic Services Summary."
- Dervin, Brenda and Michael Nilan (1986). "Information Needs and Uses."
- Dillon, Andrew (1987). "A Psychological View of 'User-Friendliness.'"
- Dunn, Kathleen (1986). "Psychological Needs and Source Linkages in Undergraduate Information-Seeking Behavior."
- Hewins, Elizabeth T. (1990). "Information Need and Use Studies."
- Kemp, Alisdair (1990). "Users."
- Nahl-Jakobovits, Diane and Leon A. Jakobovits (1992). "A Content Analysis Method for Developing User-Based Objectives."
- Taylor, Robert S. (1991). "Information Use Environments."
- Varlejs, Jana, ed. (1987). Information Seeking: Basing Services on Users' Behaviors.
- Westbrook, Lynn (1993). "User Needs: A Synthesis and Analysis of Current Theories for the Practitioner."



## **II.E. User-Intermediary Interaction**

- Allen, Bryce (1988). "Text Structures and User-Intermediary Interaction."
- Belkin, Nicholas J. (1987). "User/Intermediary Interaction Analysis: Foundation for Designing Intelligent Information Systems."
- Dervin, Brenda (1986). "Neutral Questioning: A New Approach to the Reference Interview."
- Durrance, Joan (1986). "The Influence of Reference Practices on the Client-Librarian Relation."
- Egan, Philip J. (1992). "Bridging the Gap Between the Student and the Library."
- Hatchard, Desmond B. and Phyllis Toy (1986). "Librarians' Views on the Psychological Barriers Problem."
- Hatchard, Desmond B. and Phyllis Toy (1986). "The Psychological Barriers Between Library Users and Library Staff -- An Exploratory Investigation."
- Hicks, Jack A. (1992). "Mediation in Reference Service to Extend Patron Success."
- Kuhlthau, Carol C. (1992). "Exploration into Stages in the Information Search Process in Online Information Retrieval: Communication Between Users and Intermediaries."
- Reichel, Mary (1988). "Library Literacy."
- Rice, James (1990). "The Effect of End-User Searching on the Role of the Reference Librarian."
- Saracevic, Tefko (1989). "Modeling and Measuring User-Intermediary-Computer Interaction in Online Searching: Design of a Study."
- Saracevic, Tefko and others (1990). "Nature of Interaction Between Users and Intermediaries in Online Searching: A Qualitative Analysis."
- Spink, Amanda and Colleen Cool (1992). "Recognition of Stages in the User's Information-Seeking Process During Online Searching by Novice Searchers."
- White, Herbert S. (1992). "The Reference Librarian as Information Intermediary: The Correct Approach is the One That Today's Client Needs Today."

## **II.F. Human-Computer Interaction**

- Borgman, Christine L. (1986). "Human-Computer Interaction with Information Retrieval Systems: Understanding Complex Communication Behavior."
- Borgman, Christine L. (1984). "Psychological Research in Human-Computer Interaction."
- Bullinger, H.-J. and B. Shackel (1987). Human-Computer Interaction -- INTERACT '87.
- Carroll, John M., ed. (1987). Interfacing Thought: Cognitive Aspects of Human-Computer Interaction.
- Dalrymple, Prudence W. and Douglas L. Zweizig (1992). "Users' Experience of Information Retrieval Systems: An Exploration of the Relationship Between Search Experience and Affective Measures."
- Dillon, Andrew (1987). "A Psychological View of 'User-Friendliness.'"
- Fowler, C. J. H. and D. Murray (1987). "Gender and Cognitive Style Differences at the Human-Computer Interface."
- Hert, Carol A. and Michael S. Nilan (1991). "User-Based Information Retrieval System Interface Evaluation: An Examination of an Online Public Access Catalog."
- King, David and Betsy Baker (1987). "Human Aspects of Library Technology: Implications for Academic Library User Education."
- King, David and Betsy Baker (1988). "Teaching End-Users to Search: Issues and Problems."
- Landauer, Thomas K. (1987). "Relations Between Cognitive Psychology and Computer System Design."
- Saracevic, Tefko (1989). "Modeling and Measuring User-Intermediary-Computer Interaction in Online Searching: Design of a Study."
- Sasse, Martina-Angela (1991). "How to T(r)ap Users' Mental Models."
- Shaw, Debora (1991). "The Human-Computer Interface for Information Retrieval."
- Tauber, M. J. and D. Ackermann, eds. (1991). Mental Models and Human-Computer Interaction 2.

## **H.G. Individual Differences, Searching Styles**

- Balaraman, Kamala (1991). "End-User Studies in CD-ROM Environment: Work in Progress."
- Borgman, Christine L. (1989). "All Users of Information Retrieval Systems are not Created Equal: An Exploration into Individual Differences."
- Borgman, Christine L. (1986). "Individual Differences in the Use of Information Retrieval Systems: A Pilot Study."
- Fidel, Raya (1990). "Online Searching Styles."
- Fidel, Raya (1991). "Searchers' Selection of Search Keys: III. Searching Styles."
- Logan, Elisabeth and Nancy N. Woelfl (1986). "Individual Differences in Online Search Behavior of Novice Searchers."
- Robertson, Ivan T. (1985). "Human Information-Processing Strategies and Style."
- Saracevic, Tefko (1991). "Individual Differences in Organizing, Searching and Retrieving Information."
- Sein, Maung and others (1987). "Conceptual Models in Training Novice Users."
- Small, Ruth V. and Barbara L. Grabowski (1992). "An Exploratory Study of Information-Seeking Behaviors and Learning with Hypermedia Systems."
- Woelfl, Nancy N. (1984). "Individual Differences in Online Bibliographic Searching: The Effect of Learning Styles and Cognitive Abilities on Process and Outcome."

### **III. Characteristics of Searchers**

#### **III.A. Academic Background, Knowledge of Subject**

##### **III.A.1. More Than One Academic Discipline Considered**

- Allen, Bryce (1990). "Effects of Academic Background on Statements of Information Need."
- Allen, Bryce (1991). "Topic Knowledge and Online Catalog Search Formulation."
- Bartolo, Laura M. and Timothy D. Smith (1993). "Interdisciplinary Work and the Information Search Process: A Comparison of Manual and Online Searching."
- Borgman, Christine L. (1986). "Individual Differences in the Use of Information Retrieval Systems: A Pilot Study."
- Cherry, Joan M. and Marshall Clinton (1989). "A Profile of User Background and User Satisfaction with the University of Toronto OPAC and the Implications for User Training and User Interfaces."
- Dimitroff, Alexandra (1992). "Mental Models Theory and Search Outcome in a Bibliographic Retrieval System."
- Ensor, Pat (1992). "User Practices in Keyword and Boolean Searching on an Online Public Access Catalog."
- Frost, Carolyn O. (1987). "Faculty Use of Subject Searching in Card and Online Catalogs."
- Hurych, Jitka (1986). "After Bath: Scientists, Social Scientists, and Humanists in the Context of Online Searching."
- Jackson-Brown, Grace and Gwen Pershing (1992). "Comparisons of Graduate and Undergraduate End-Users of ERIC and PsycLIT on CD-ROM."
- Jacobson, Thomas and David Fusani (1992). "Computer, System, and Subject Knowledge in Novice Searching of a Full-Text, Multifile Database."
- Jayatilleke, Raja (1992). "CD-ROM End User Searching: Menu-Driven Versus Command Mode."

- Laborie, Tim and Ken Garson (1988). "End User Search Systems: Access to Library and Information Science Literature."
- Linde, Lena and Monica Bergstrom (1988). "Impact of Prior Knowledge of Informational Content and Organization on Learning Search Principles in a Database."
- Marchionini, Gary and others (1993). "Information Seeking in Full-Text End-User-Oriented Search Systems: The Roles of Domain and Search Expertise."
- Stoan, Stephen K. (1991). "Research and Information Retrieval Among Academic Researchers: Implications for Library Instruction."
- Walker, Geraldene (1988). End-User Searching: A Selection of the Literature for 1983-1988. An ERIC Synthesis Paper.

### III.A.2. Science Information

- Brundage, Christina A. (1989). "Teaching Controlled Vocabulary and Natural Language to End-Users of Scientific Online and CD-ROM Databases."
- Culbertson, Michael (1992). "Analysis of Searches by End-Users of Science and Engineering CD-ROM Databases in an Academic Library."
- Hurd, Julie M. and others (1992). "Information Seeking Behavior of Faculty: Use of Indexes and Abstracts by Scientists and Engineers."
- Liu, Mengxiang (1992). "The Complexity of Science Faculty's Information Seeking Behavior."
- Meyer, Daniel E. and Den Ruiz (1990). "End-User Selection of Databases -- Part 1: Science/Technology/Medicine."

### III.A.3. Social Science Information

Cameron, Lynn and James Hart (1992). "Assessment of PsycLIT Competence, Attitudes, and Instructional Methods."

Ellis, David (1989). "A Behavioral Approach to Information Retrieval Design."

Jackson-Brown, Grace and Gwen Pershing (1992). "Comparisons of Graduate and Undergraduate End-Users of ERIC and PsycLIT on CD-ROM."

Raimondo, Paula G. (1990). "CD-ROM Teaching Techniques: Instructing PsycLIT Users in a Health Sciences Library."

Ruiz, Den and Daniel E. Meyer (1990). "End-User Selection of Databases -- Part III: Social Science/Arts & Humanities."



### **III.A.4. Humanities Information**

Ruiz, Den and Daniel E. Meyer (1990). "End-User Selection of Databases -- Part III: Social Science/Arts & Humanities."

Walker, Geraldene (1990). "Searching the Humanities: Subject Overlap and Search Vocabulary."

Wiberly, Stephen E., Jr. (1993). "Subject Access in the Humanities and the Precision of the Humanist's Vocabulary."

### **III.A.5. Medical Information**

Glitz, Beryl (1989). "The Role of Medical Libraries in End-User Searching: Teaching the MEDLINE Database to Health Care Professionals."

Ikeda, Naomi R. and Diane G. Schwartz (1992). "Impact of End-User Search Training on Pharmacy Students: A Four-Year Follow-Up Study."

Raimondo, Paula G. (1990). "CD-ROM Teaching Techniques: Instructing PsycLIT Users in a Health Sciences Library."

Seago, Brenda L. and Frank M. Campbell (1993). "A Comparison of MEDLINE CD-ROM and Librarian-Mediated Search Service Users."

Sewell, Winifred and Sandra Teitelbaum (1986). "Observations of End-User Online Searching Behavior over Eleven Years."

Walton, Graham and Sarah Nettleton (1992). "Reflective and Critical Thinking in User Education Programmes: Two Case Studies."

Wildemuth, Barbara M. and others (1992). "Search Moves Made by Novice End Users."

Zaroukian, Michael H. and others (1990). "MEDLINE Computerized Literature Searching Using GRATEFUL MED: A Pilot Instructional Project for Entering Medical Students."

### **III.B. Searching Experience** (Novices, Experts, End-Users, Search Intermediaries)

- Ensor, Pat (1992). "Knowledge Level of Users and Nonusers of Keyword/Boolean Searching on an Online Public Access Catalog."
- Ensor, Pat (1992). "User Characteristics of Keyword Searching in an OPAC."
- Fenichel, Carol H. (1981). "Online Searching: Measures that Discriminate Among Users with Different Types of Experience."
- Howard, Helen (1982). "Measures that Discriminate Among Searchers with Different Training and Experience."
- Jacobson, Thomas and David Fusani (1992). "Computer, System, and Subject Knowledge in Novice Searching of a Full-Text, Multifile Database."
- Laborie, Tim and Ken Garson (1988). "End User Search Systems: Access to Library and Information Science Literature."
- Logan, Elisabeth (1990). "Cognitive Styles and Online Behavior of Novice Searchers."
- Logan, Elisabeth and Nancy N. Woelfl (1986). "Individual Differences in Online Searching Behavior of Novice Searchers."
- Marchionini, Gary and others (1993). "Information Seeking in Full-Text End-User-Oriented Search Systems: The Roles of Domain and Search Expertise."
- Mischo, William M. and Jounghyoun Lee (1987). "End-User Searching of Bibliographic Databases."
- Penhale, Sara J. and Nancy Taylor (1986). "Integrating End-User Searching into a Bibliographic Instruction Program."
- Pfaffenberger, Bryan (1990). "The Emerging Patterns of End-User Searching."
- Schultz, Kim and Kristine Salomon (1990). "End-Users Respond to CD-ROM."
- Seago, Brenda L. and Frank M. Campbell (1993). "A Comparison of MEDLINE CD-ROM and Librarian-Mediated Search Service Users."

- Solomon, Paul (1992). "On the Dynamics of Information System Use: From Novice to ?"
- Streitz, Norbert A. and others (1987). "From Novice to Expert User: A Transfer of Learning Experiment on Different Interaction Modes."
- Sullivan, Michael and others (1988). "Bibliographic Searching by End-Users and Intermediaries: Front-End Software Vs. Native DIALOG Commands."
- Tenopir, Carol and others (1991). "Strategies and Assessments Online: Novices' Experience."
- Turner, Philip M. and others (1990). "The Effects of Baud Rate, Performance Anxiety, and Experience on Online Bibliographic Searches."
- Walker, Geraldene (1988). "A Comparative Evaluation of End-User Search Performance in an Academic Environment."
- Walker, Geraldene (1990). "Search Performance of Naive End-Users in an Academic Environment."
- Wildemuth, Barbara M. and others (1992). "Search Moves Made by Novice End Users."

**III.C. Level of Education of Searchers**  
(Faculty, Graduate Students, Undergraduate  
Students, Practitioners, Professionals)

- Clark, Katharine E. and Joni Gomez (1990). "Faculty Use of Databases at Texas A&M University."
- Dennis, Nancy and Nancy D. Harrington (1990). "Librarian and Faculty Member Differences in Using Information Technologies: A Prerequisite for Developing Effective Bibliographic Instruction Programs."
- Fister, Barbara (1992). "The Research Processes of Undergraduate Students."
- Frost, Carolyn O. (1987). "Faculty Use of Subject Searching in Card and Online Catalogs."
- Glitz, Beryl (1989). "The Role of Medical Libraries in End-User Searching: Teaching the MEDLINE Database to Health Care Professionals."
- Hurd, Julie M. and others (1992). "Information Seeking Behavior of Faculty: Use of Indexes and Abstracts by Scientists and Engineers."
- Ikeda, Naomi R. and Diane G. Schwartz (1992). "Impact of End-User Search Training on Pharmacy Students: A Four-Year Follow-Up Study."
- Jackson-Brown, Grace and Gwen Pershing (1992). "Comparisons of Graduate and Undergraduate End-Users of ERIC and PsycLIT on CD-ROM."
- Kuhlthau, Carol C. (1988). "Longitudinal Case Studies of the Information Search Process of Users in Libraries."
- Liu, Mengxiong (1992). "The Complexity of Science Faculty's Information Seeking Behavior."
- Steffen, Susan Swords (1988). "Faculty as End-Users: Strategies, Challenges, and Rewards."
- Torok, Andrew and Jitka Hurych (1986). "End User Online Searching Among University Faculty."
- Walton, Graham and Sarah Nettleton (1992). "Reflective and Critical Thinking in User Education Programmes: Two Case Studies."

### III.D. Other Characteristics of Users or More Than One Characteristic Considered

Bellardo, Trudi (1985). "An Investigation of Online Searcher Traits and Their Relationship to Search Outcome."

Jacobsor., Thomas and David Fusani (1992). "Computer, System, and Subject Knowledge in Novice Searching of a Full-Text, Multifile Database."

Linde, Lena and Monica Bergstrom (1988). "Impact of Prior Knowledge of Informational Content and Organization on Learning Search Principles in a Database."

Sewell, Winifred and Sandra Teitelbaum (1986). "Observations of End-User Online Searching Behavior over Eleven Years."

Walker, Geraldene (1988). End-User Searching: A Selection of the Literature for 1983-1988.

#### IV. User Education for Information Seeking and Retrieving

##### IV.A. Implications of Information Technology for User Education and Reference Service

- Becker, Karen A. and Samuel T. Huang (1992). "Implications of CD-ROM Usage for Bibliographic Instruction."
- Beth, Amy and Evan I. Farber (1992). "Lessons from DIALOG: Technology Impacts Teaching/Learning."
- Blumenthal, Caroline and others (1993). "The Impact of CD-ROM Technology on a Bibliographic Instruction Program."
- Doyal, Patricia A. (1992). "Effective End-User Search Services: The Instructional Imperative."
- Farber, Evan I. and others (1992). "Total Access to Information: The Impact on Classroom Teaching."
- Fleming, Hugh (1990). "Educating the Future End-User of Online Information Services."
- Hixson, Charles R. (1993). "CD-ROM and the Undergraduate: Reference and Instruction at Risk."
- Jacobson, Trudi E. (1992). "All I Need Is in the Computer: Reference and Bibliographic Instruction in the Age of CD-ROMs."
- King, David and Betsy Baker (1987). "Human Aspects of Library Technology: Implications for Academic Library User Education."
- Kleiner, Jane and Lea Orkiszewski, eds. (1992). The Electronic Library: Linking People, Information, and Technology.
- LePoer, Peter M. and Carol A. Mularski (1989). "CD-ROM's Impact on Libraries and Users."
- Littlejohn, Alice C. (1987). "End-User Searching in an Academic Library -- The Students' View."
- Pask, Judith M. (1990). User Education for Online Systems in Libraries: A Selective Bibliography 1970-1988.

Puttapithakporn, Somporn (1990). "Interface Design and User Problems and Errors: A Case Study of Novice Searchers."

Salomon, Kristine (1988). "The Impact of CD-ROM on Reference Departments."

Schultz, Kim and Kristine Salomon (1990). "End-Users Respond to CD-ROM."

Wallace, Patricia M. (1993). "How Do Patrons Search the Online Catalog When No One's Looking? Transaction Log Analysis and Implications for Bibliographic Instruction and System Design."



#### **IV.B. The Role of Academic Librarians (Educators, Intermediaries)**

- Bodi, Sonia (1992). "Collaborating with Faculty in Teaching Critical Thinking: The Role of Librarians."
- Bourne, Donna E. (1989). "End-Users, Front Ends and Librarians."
- Collins, Kelly L. K. and Sharon Nelson Takacs (1993). "Information Technology and the Teaching Role of the College Librarian."
- Doyle-Wilch, Barbara and Marian I. Miller (1992). "Mediation and Schemata Theory in Meaningful Learning: The Academic Librarian's Role in the Educational Process."
- Evans, Anita K. (1992). "Electronic Reference Services: Mediation for the 1990s."
- Friend, Linda (1985). "Independence at the Terminal: Training Student End Users to Do Online Literature Searching."
- Glitz, Beryl (1989). "The Role of Medical Libraries in End-User Searching: Teaching the MEDLINE Database to Health Care Professionals."
- Hensley, Randall (1991). "Learning Style Theory and Learning Transfer Principles During Reference Interview Instruction."
- Kenny, Richard F. and Eileen Schroeder (1992). "An Evaluation of a Training and Assistance Program for the CD-ROM Databases: Reflections on the Process."
- Njelsen, Brian (1987). "Teacher or Intermediary: Alternative Professional Models in the Information Age."
- Rice, James (1990). "The Effect of End-User Searching on the Role of the Reference Librarian."
- Shipman, Barbara L. and others (1992). "End-User Searching and New Roles for Librarians."
- White, Herbert S. (1992). "The Reference Librarian as Information Intermediary: The Correct Approach Is the One That Today's Client Needs Today."

#### IV.C. Information Literacy

- Breivik, Patricia Senn (1992). "Education for the Information Age."
- Breivik, Patricia Senn and Dan L. Jones (1993). "Information Literacy: Liberal Education for the Information Age."
- Breivik, Patricia Senn and E. Gordon Gee (1989). "The Information Society and Higher Education."
- Coons, Bill and Jan Kennedy Olsen (1989). "Imperatives for the Second Century: Information Literacy and the Quality of Undergraduate Education in America."
- Dusenbury, Carolyn (1989). "Library Literacy and Lifelong Learning."
- Farmer, D. W. and Terrence F. Mech, eds. (1992). Information Literacy: Developing Students as Independent Learners.
- Frank, Polly (1989). "Information Literacy and Lifelong Learning."
- Frick, Elizabeth (1991). "Critical Analysis as a Pivotal Act: Information Literacy or Spinach?"
- Huston, Mary M. (1990). "Extending Information Universes Through Systems Thinking."
- Huston, Mary M., ed. (1991). "Toward Information Literacy -- Innovative Perspectives for the 1990s."
- Isbell, Dennis and Carol Hammond (1993). "Information Literacy Competencies."
- Jeng, Ling Hwey (1989). "Information Literacy for Information Professionals."
- Miller, William (1992). "The Future of Bibliographic Instruction and Information Literacy for the Academic Librarian."
- Nahl-Jakobovits, Diane and Leon A. Jakobovits (1993). "Bibliographic Instruction Design for Information Literacy: Integrating Affective and Cognitive Objectives."
- Olsen, Jan Kennedy (1992). "The Electronic Library and Literacy."
- Pausch, Lois M. and Mary Pagliero Popp (1989). "Bridges to the Future: A Changing Focus for Bibliographic Instruction and Information Literacy."

Rader, Hannelore and William Coons (1992). "Information Literacy: One Response to the New Decade."

Yee, Sandra G. (1989). "Information Literacy Skills: How Students Learn Them and Why."

#### **IV.D. Critical Thinking**

- Bodi, Sonia (1992). "Collaborating with Faculty in Teaching Critical Thinking: The Role of Librarians."
- Bodi, Sonia (1988). "Critical Thinking and Bibliographic Instruction: The Relationship."
- Bodi, Sonia (1990). "Through a Glass Darkly: Critical Thinking and Bibliographic Instruction."
- Engeldinger, Eugene A. (1988). "Bibliographic Instruction and Critical Thinking: The Contribution of the Annotated Bibliography."
- Engeldinger, Eugene A. (1991). "Bibliographic Instruction and the Teaching of Critical Thinking."
- Fink, Deborah (1991). "Critical Thinking = Creative Problem Solving + Critical Evaluation."
- Ford, Nigel (1986). "Psychological Determinants of Information Needs: A Small-Scale Study of Higher Education Students."
- Frick, Elizabeth (1991). "Critical Analysis as a Pivotal Act: Information Literacy or Spinach?"
- Jacobson, Trudi E. and Lynne M. Martin (1993). "Merging Critical Thinking and the Electronic Library: A Visionary Perspective of SuperPAC, an Enhanced OPAC."
- Nash, Stan and Myoung C. Wilson (1991). "Value-Added Bibliographic Instruction: Teaching Students to Find the Right Citations."
- Niles, Nancy and Trudi E. Jacobson (1991). "'Teaching Critical Thinking in Libraries': A Continuing Education Course."
- Oberman, Cerise (1991). "Avoiding the Cereal Syndrome, or Critical Thinking and the Electronic Environment."
- Poirier, Gayle and Susan Hocker (1993). "Teaching Critical Thinking in a Library Credit Course."
- Totten, Nancy T. (1990). "Teaching Students to Evaluate Information: A Justification."
- Walton, Graham and Sarah Nettleton (1992). "Reflective and Critical Thinking in User Education Programmes: Two Case Studies."

#### **IV.E. Learning Theories, Learning Styles**

- Bodi, Sonia (1992). "Learning Style Theory and Bibliographic Instruction: The Quest for Effective Bibliographic Instruction."
- Bodi, Sonia (1990). "Teaching Effectiveness and Bibliographic Instruction: The Relevance of Learning Styles."
- Doyle-Wilch, Barbara and Marian I. Miller (1992). "Mediation and Schemata Theory in Meaningful Learning: The Academic Librarian's Role in the Educational Process."
- Fielder, Marie and Mary M. Huston (1991). "Access Ability: Harnessing Knowledge of 'Thinking Like a Searcher.'"
- Ford, Nigel (1990). "Learning Styles, Strategies, and Stages."
- Hannafin, Michael J. and Lloyd P. Rieber (1989). "Psychological Foundations of Instructional Design for Emerging Computer-Based Technologies."
- Hensley, Randall (1991). "Learning Style Theory and Learning Transfer Principles During Reference Interview Instruction."
- Huston, Mary M. (1989). "Search Theory and Instruction for End Users of Online Bibliographic Information Retrieval Systems: A Literature Review."
- Jacobson, Frances F. and Michael J. Jacobson (1992). "Bibliographic Instruction in the Electronic Environment: Incorporating Recent Cognitive Theories of Learning."
- Jacobson, Frances F. and Michael J. Jacobson (1993). "Representative Cognitive Learning Theories and BI: A Case Study of End User Searching."
- Jakobovits, Leon A. and Diane Nahl-Jakobovits (1987). "Learning the Library: A Taxonomy of Skills and Errors."
- Litzinger, Mary Ellen and Bonnie Osif (1993). "Accommodating Diverse Learning Styles: Designing Instruction for Electronic Information Sources."
- McNeer, Elizabeth J. (1991). "Learning Theories and Library Instruction."
- Mellon, Constance A. (1982). "Information Problem-Solving: A Developmental Approach to Library Instruction."

Mellon, Constance A. and Kathryn E. Pagles (1987). "Bibliographic Instruction and Learning Theory."

Reichel, Mary (1988). "Library Literacy."

Schmalhofer, Franz and Otto Kuhn (1991). "The Psychological Processes of Constructing a Mental Model when Learning by Being Told, From Examples, and by Exploration."

Shuell, Thomas J. (1986). "Cognitive Conceptions of Learning."

Small, Ruth V. and Barbara L. Grabowski (1992). "An Exploratory Study of Information-Seeking Behaviors and Learning with Hypermedia Information Systems."

Wyman, Andrea (1989). "Learning Style: Its Place in Library Instruction."

#### IV.F. Cognitive Models, Mental Models

- Baker, Betsy (1986). "A Conceptual Framework for Teaching Online Catalog Use."
- Baker, Betsy and Beth Sandore (1990). "Effective Information Retrieval: A Model for Teaching and Learning."
- Baker, Betsy and others (1991). "Making Connections: Teaching Information Retrieval."
- Borgman, Christine L. (1984). "The User's Mental Model of an Information Retrieval System: Effects on Performance."
- Burt, Patricia V. and Mark T. Kinnucan (1990). "Information Models and Modeling Techniques for Information Systems."
- Dervin, Brenda (1992). "From the Mind's Eye of the User: The Sense-Making Qualitative-Quantitative Methodology."
- Hewett, Thomas T. and Sari Scott (1987). "The Use of Thinking-out-loud and Protocol Analysis in Development of a Process Model of Interactive Database Searching."
- Huston, Mary M. (1989). "Toward Contextual Sensitivity: Approaches to End User Instruction in the USA."
- Kuhlthau, Carol C. and others (1989). Facilitating Information Seeking through Cognitive Modeling of the Search Process.
- Kuhlthau, Carol C. and others (1989). "Flowcharting the Information Search: A Method of Eliciting Users' Mental Models."
- Linde, Lena and Monica Bergstrom (1988). "Impact of Prior Knowledge of Informational Content and Organization on Learning Search Principles in a Database."
- Sasse, Martina-Angela (1991). "How to T(r)ap Users' Mental Models."
- Schmalhofer, Franz and Otto Kuhn (1991). "The Psychological Processes of Constructing a Mental Model when Learning by Being Told, From Examples, and by Exploration."
- Sein, Maung and others (1987). "Conceptual Models in Training Novice Users."
- Sein, Maung K. and Robert P. Bostrom (1989). "Individual Differences and Conceptual Models in Training Novice Users."

Tauber, M. J. and D. Ackermann, eds. (1991). Mental Models and Human-Computer Interaction 2.



#### **IV.G. Instructional Objectives, Teaching Methods, User Education Program Descriptions**

- Allen, Gillian (1990). "CD-ROM Training: What Do the Patrons Want?"
- Association of College and Research Libraries (1987). "Model Statement of Objectives for Academic Bibliographic Instruction: Draft Revision."
- Baker, Betsy (1986). "A Conceptual Framework for Teaching Online Catalog Use."
- Baker, Betsy and Beth Sandore (1990). "Effective Information Retrieval: A Model for Teaching and Learning."
- Baker, Betsy and others (1991). "Making Connections: Teaching Information Retrieval."
- Barbuto, Domenica M. and Elena E. Cevallos (1991). "End-User Searching: Program Review and Future Prospects."
- Becker, Karen A. and Samuel T. Huang (1992). "Implications of CD-ROM Usage for Bibliographic Instruction."
- Bostian, Rebecca and Anne Robbins (1990). "Effective Instruction for Searching CD-ROM Indexes."
- Buchanan, Nancy L. and others (1992). "The Effectiveness of a Projected Computerized Presentation in Teaching Online Library Catalog Searching."
- Cameron, Lynn and James Hart (1992). "Assessment of PsycLIT Competence, Attitudes, and Instructional Methods."
- Cheney, Debora (1991). "Evaluation-Based Training: Improving the Quality of End-User Searching."
- Davis, Dorothy F. (1993). "A Comparison of Bibliographic Instruction Methods on CD-ROM Databases."
- Dennis, Nancy and Nancy D. Harrington (1990). "Librarian and Faculty Member Differences in Using Information Technologies: A Prerequisite for Developing Effective Bibliographic Instruction Programs."
- Dennis, Nancy and Alice Stadthaus (1990). "New Technologies: A 3-Credit Course for Undergraduates."

- Fielder, Marie and Mary M. Huston (1991). "Access Ability: Harnessing Knowledge of 'Thinking Like a Searcher.'"
- Fister, Barbara (1992). "The Research Processes of Undergraduate Students."
- Fister, Barbara (1990). "Teaching Research as a Social Act: Collaborative Learning and the Library."
- Fleming, Hugh (1990). "Educating the Future End-User of Online Information Services."
- Hamilton, Dennis (1985). "Library Users and Online Systems: Suggested Objectives for Library Instruction."
- Hannafin, Michael J. and Lloyd P. Rieber (1989). "Psychological Foundations of Instructional Design for Emerging Computer-Based Instructional Technologies."
- Howden, Norman and others (1987). "SCIMATE as a Learning Tool for Online Searching."
- Huston, Mary M. (1990). "Extending Information Universes Through Systems Thinking."
- Huston, Mary M. (1989). "Search Theory and Instruction for End Users of Online Bibliographic Information Retrieval Systems."
- Huston, Mary M. (1989). "Toward Contextual Sensitivity: Approaches to End User Instruction in the USA."
- Huston, Mary M. and Cerise Oberman (1989). "Making Communication: A Theoretical Framework for Educating End-Users of Online Bibliographic Information Retrieval Systems."
- Ikeda, Naomi R. and Diane G. Schwartz (1992). "Impact of End-User Search Training on Pharmacy Students: A Four-Year Follow-Up Study."
- Jacobson, Frances F. and Michael J. Jacobson (1992). "Bibliographic Instruction in the Electronic Environment: Incorporating Recent Cognitive Theories of Learning."
- Jakobovits, Leon A. and Diane Nahl-Jakobovits (1990). "Measuring Information Searching Competence."
- Johnson, Mary E. and Barbara S. Rosen (1990). "CD-ROM End-User Instruction: A Planning Model."
- Kemp, Alisdair (1990). "Users."

- Kuhlthau, Carol C. (1990). "The Information Search Process: From Theory to Practice."
- Kuhlthau, Carol C. (1991). "The Process Approach to Bibliographic Instruction: An Examination of the Search Process in Preparation for Writing the Research Paper."
- Littlejohn, Alice C. (1987). "End-User Searching in an Academic Library -- The Students' View."
- MacDonald, Linda Brew (1990). "Instruction for and with CD-ROM."
- Manderack, Scott B. and John Mark Tucker (1993). "Selected Readings on Bibliographic Instruction, 1980-1992."
- Masters, Deborah (1988). "Library Users and Online Systems: Suggested Objectives for Library Instruction."
- McClintock, Marsha Hamilton, ed. (1983). Training Users of Online Public Access Catalogs.
- Mellon, Constance A. (1988). "Attitudes: The Forgotten Dimension in Library Instruction."
- Mellon, Constance A. (1982). "Information Problem-Solving: A Developmental Approach to Library Instruction."
- Mellon, Constance A. (1986). "Library Anxiety: A Grounded Theory and Its Development."
- Mularski, Carol A. and Pamela S. Bradigan (1993). "End-User Searching: Review of a Modular Program."
- Nahl-Jakobovits, Diane and Leon A. Jakobovits (1993). "Bibliographic Instructional Design for Information Literacy: Integrating Affective and Cognitive Objectives."
- Nahl-Jakobovits, Diane and Leon A. Jakobovits (1992). "A Content Analysis Method for Developing User-Based Objectives."
- Nahl-Jakobovits, Diane and Leon A. Jakobovits (1988). "Problem Solving, Creative Librarianship, and Search Behavior."
- Nash, Stan and Myoung C. Wilson (1991). "Value-Added Bibliographic Instruction: Teaching Students to Find the Right Citations."

- Poirier, Gayle and Susan Hocker (1993). "Teaching Critical Thinking in a Library Credit Course."
- Raimondo, Paula G. (1990). "CD-ROM Teaching Techniques: Instructing PsycLIT Users in a Health Sciences Library."
- Ridgeway, Trish (1989). "Integrating Active Learning Techniques into the One-Hour Bibliographic Instruction Lecture."
- Rubens, Donna (1991). "Formulation Rules for Posing Good Subject Questions: Empowerment for the End-User."
- Sandore, Beth and Betsy Baker (1990). "Teaching the Online Catalogue: A New Era of Information Retrieval."
- Saule, Mara R. (1990). "Teaching for Library Technologies."
- Sherratt, Christine S. and Martin L. Schlabach (1990). "The Applications of Concept Mapping in Reference and Information Services."
- Smith, Doris A. (1992). "Innovations in Education and Training."
- Smith, Elizabeth (1989). "Applying Cognitive Methods to Bibliographic Instruction."
- Stewart, Linda (1993). "Helping Students During Online Searches: An Evaluation."
- Sullivan, Patricia and Peggy Seiden (1985). "Educating Online Catalog Users: The Protocol Assessment of Needs."
- Taylor, Nancy and Sara Penhale (1988). "End-User Searching and Bibliographic Instruction."
- Van Beek, Jan and others (1989). "Computer-Based Learning for On-Line Data Base Search."
- Ward, Sandra N. and Laura M. Osegueda (1984). "Teaching University Student End-Users about Online Searching."
- Warmkessel, Marjorie M. and Frances M. Carothers (1993). "Collaborative Learning and Bibliographic Instruction."
- Wozny, Lucy Anne (1988). "College Students as End User Searchers: One University's Experience."