
Information Literacy 1973–2002: A Selected Literature Review

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ABSTRACT

MORE THAN 5000 PUBLICATIONS related to library user instruction and information literacy have been published and reviewed in the past thirty years. New developments in education and technology during the last two decades have affected user instruction and have led to the emergence of information literacy. Based on needs related to the rapid development of information technology and the evolving information society, librarians have begun teaching information skills to all types of users to ensure that they gain information fluency so they can become productive and effective information users both in the education environment and in the work environment.

The number of publications related to user instruction and information literacy, like the field itself, show phenomenal growth during the past three decades as demonstrated by the fact that in 1973 twenty-eight publications were reviewed, and in 2002 more than 300 publications dealing with the topic of information literacy will be issued. It is noteworthy that in the last decade there has been a tremendous growth in publications related to information literacy globally. During the 1970s, publications indicate that user instruction activities were of concern primarily to librarians in the United States, Canada, the United Kingdom, Australia, and New Zealand. At the present time, publications indicate a major concern with information literacy not only in the countries mentioned above but also in China, Germany, Mexico, Scandinavia, Singapore, South Africa, South America, Spain, and others.

On an annual basis, the majority of the publications have addressed information literacy in academic libraries (60 percent) followed by publications related to information literacy instruction in school media centers (20 percent).

Table 1. Number of Publications Reviewed 1973–2002

Year	Total	Year	Total
1973	28	1988	149
1974	38	1989	158
1975	49	1990	132
1976	68	1991	195
1977	104	1992	217
1978	132	1993	186
1979	168	1994	164
1980	109	1995	274
1981	144	1996	190
1982	119	1997	195
1983	161	1998	286
1984	239	1999	232
1985	123	2000	237
1986	142	2001 (est.)	310
1987	130	2002 (est.)	330
		Total	5009

INFORMATION LITERACY AND HIGHER EDUCATION

The review of the literature indicates that the majority of the publications address information literacy in higher education. During the twentieth century and at the beginning of the twenty-first century, academic and school librarians developed the concept of information skills instruction from library orientation to library instruction to course-integrated user instruction. Librarians developed teaching materials, guides, teaching methods, library skills tests, Web-based tutorials and other online teaching modules. Although the information skills teaching units were often separate from the academic curriculum and not integrated into total instructional programs for students, librarians have continually tried to integrate the teaching of information skills modules into the curriculum.

Throughout this period librarians have worked diligently to form partnerships with faculty and teachers in teaching and learning, but success has often eluded them. In isolated instances, private liberal arts colleges were able to develop strong faculty-librarian partnerships for course-integrated information literacy instruction.

USER INSTRUCTION IN SCHOOLS

The literature indicates that school librarians and school media specialists have shared academic librarians' concern to teach students information skills from kindergarten through high school. Media specialists had to address situations similar to their academic colleagues but they have begun to be more successful in these endeavors in recent years. The emergence of "Information Power," a document outlining information skills needs and appropriate instruction for students in kindergarten through the

twelfth grade, has had a major impact on information skills instruction in schools. State education agencies and school districts continue to mandate information skills instruction as part of the curriculum.

USER INSTRUCTION IN PUBLIC LIBRARIES

As documented through the library literature, past user instruction in public libraries has been minimal. However, during the last decade, the infusion of information technology and the development of the Internet have created many needs and demands in the public libraries for information and technical skill instruction. New demands for information support related to distance education and information support for students from K-12 have been growing and public librarians have to address these new training needs.

USER INSTRUCTION IN SPECIAL LIBRARIES

Based on the published literature, special libraries in business environments tend to do very little instruction for their users because special library users expect to receive from their librarians information ready to use. Librarians in medical, law, and other professional libraries provide very specific and intense information skills instruction to their users as shown in the literature. Excellent course-integrated modules have been developed by these special librarians to aid their library users in learning necessary information skills.

INFORMATION SKILLS TRAINING IN THE WORKPLACE

In this new century it is becoming apparent that most employees in the workforce have to deal with both a constantly increasing volume of information and constantly changing technology. To be successful in the information-rich work environment, employees need continual training and development related to information literacy. Employers are beginning to realize that new information skills training is necessary for their workers and librarians could become leaders in this endeavor.

ASSESSMENT OF INFORMATION LITERACY

During the past three decades the evaluation of user instruction outcomes was minimal. During the first two decades, measurement concerns related to how librarians performed as teachers, and what the students gained from the instruction in terms of finding information, compiling good bibliographies and using appropriate references in term papers. During the last decade there has been more concern with evaluating student learning outcomes and students' research products as well as students' acquisition of information skills, which will enable them perform productively in the work environment.

THE GLOBAL ENVIRONMENT

Although, during the first two decades reviewed, many of the publications are in the English language, they include publications from Australia, New Zealand, Canada, the United Kingdom, and other countries where articles and books were published in English. These countries shared the concerns of librarians in the United States regarding information skills instructions and many noteworthy programs are in existence in many of these countries. It is interesting to note that, in the formerly Eastern bloc countries, such as Russia and East Germany, the teaching of library skills was required. This has also been the case in China. During the last decade the interest in and concern with teaching of information skills has truly become an international concern. This can be seen in terms of publications and national conferences held on the topic of information literacy.

NATIONAL AND INTERNATIONAL CONFERENCES

During the past three decades major conferences, national, regional, and local, have been held to address topics related to user instruction. In fact the LOEX Conference originating at Eastern Michigan University in 1970 has been held for more than thirty years and the Canadian academic librarians have also sponsored more than thirty workshops on "Instruction in Library Use." In recent years Australian academic librarians have held four national conferences on information literacy and Mexican academic librarians have held three national conferences on information literacy. In the 1970s academic librarians in the United Kingdom held several workshops on user instruction, and recently Sweden and China sponsored national workshops on this topic.

NOTABLE WEB SITES

With the emergence of the World Wide Web, information literacy Web sites are being developed by academic librarians to provide online information. These Web sites provide guides, virtual library tours, tutorials, and interactive learning modules to teach information skills. Here are a few examples of Web sites for organizations, clearinghouses, and institutions related to information literacy.

The LOEX Clearinghouse was started thirty years ago as the national clearinghouse for library instruction materials for academic libraries. It has sponsored annual national conferences and has published the papers presented at these conferences, produced a newsletter, collected and lent print and audiovisual materials, and now features a Web site (<http://www.emich.edu/public/loex>).

The National Forum on Information Literacy, <http://www.infolit.org>, was created in 1990 to respond to the ALA initiatives regarding information literacy. More than seventy nonprofit and profit organizations are

members and work together to address information education challenges nationally and internationally.

The Association of College and Research Libraries (ACRL) has been deeply involved in facilitating information literacy developments nationally. The ACRL Web site offers information related to information literacy, including the Institute for Information Literacy (<http://www.ala.org/acrl/nili/nilih.html>).

The American Association of School Librarians (AASL) has developed many initiatives related to "Information Power," nine information literacy standards for student learning in the K-12 schools environment (http://www.ala.org/aasl/ip_nine.html).

EXAMPLES OF MODEL PROGRAMS

In California academic librarians have developed several noteworthy information literacy programs. The California State Universities have developed a program of information competence throughout the system (<http://www.calstate.edu/LS/infocomp.shtml>).

California State University, San Marcos, features an information literacy program based on faculty-librarian partnerships. The program aims to infuse the teaching of information skill throughout the curriculum (<http://library.csusm.edu/departments/ilp/>).

The teaching library at the University of California-Berkeley promotes information literacy as part of the undergraduate experience for students (<http://www.lib.berkeley.edu/teachinglib/>).

The Colorado Department of Education has developed a model of information literacy guidelines to focus on students as knowledge seekers, quality producers, self-directed learners, group contributors and responsible information users.

At Florida International University librarians have developed a curriculum-integrated information literacy program using online tutorials, print materials and a variety of instructions (<http://www.fiu.edu/~library/assistance/index.html>).

Several interactive information skills modules from basic skills to advanced skills were developed by librarians from all types of libraries in Kentucky and can be found at <http://www.kyvl.org/html/tutorial/research/>. The modules are being used in distance education, throughout the Kentucky commonwealth education environment, in public and school libraries. The Kentucky Virtual Library is a consortium of all types of libraries, public and private in the state.

The University of Massachusetts developed an information literacy project entitled "information literacy competencies" as part of the statewide UMASS Information Literacy Project (<http://www.lib.umassd.edu/INFOLIT/InfoLitComp.html>).

Librarians and faculty at the University of Louisville have developed an integrated information literacy program throughout the curricula including a required module for the general education component (<http://www.louisville.edu/infoliteracy>).

The University of Washington has developed the U-Wired model program which integrates electronic communication and information navigation skills into instruction and learning on campus (<http://www.washington.edu/uwired>).

The Wisconsin Association of Academic Libraries developed “information literacy competencies and criteria” for the academic institutions in the state (<http://www.wla.lib.wi.us/waal/infolit/ilcc.html>).

INTERNATIONAL PROGRAMS FOR INFORMATION LITERACY

Africa

The University of Cape Town is part of the Cape Higher Education Consortium Infolit Program. This group has worked successfully during the last decade to develop information literacy initiatives for their many students (<http://www.library.uct.ac.za/infolit/>).

UNISA—The University of South Africa—is the world’s largest distance education university and has been that for many years. Librarians at UNISA have spent many years developing library instruction for the distance education environment and they are now using Web tutorials and other online methodology (<http://www.unisa.ac.za/library/afdeling/client/usered/students/libinfo.html>).

Australia

University of Sydney librarians have a well-developed information skills program using self-paced tutorials and offering training courses and seminars throughout the curriculum (<http://www.library.usyd.edu.au/skills/>).

Queensland University of Technology offers an interesting online tutorial program to assist students in finding, using, and evaluating information (<http://www.library.qut.edu.au/elearn/tutorial.html>).

Canada

The University of Guelph librarians are addressing information literacy on their campus with tutorials, classes and instructions sessions of various kinds (<http://www.lib.uoguelph.ca/LibEd/>).

China

Librarians at Tsinghua University in Beijing are teaching many credit courses to help their students in all disciplines gain valuable information and technology skills to enable them to do better research and to use information more effectively (<http://www.tsinghua.edu.cn/eng/index.htm>).

Germany

The University of Heidelberg librarians have developed an information skills instruction program to teach their students a variety of information use skills (<http://www.ub.uni-heidelberg.de/allg/schulung.html>).

United Kingdom

The Society of College, National, and University Libraries (SCONUL) in the UK and Ireland is working on improving the quality of libraries and extending the influence of libraries in higher education. As part of these initiatives they have developed a position paper on "Information skills in higher education" (<http://www.sconul.ac.uk/>).

The University of Glasgow librarians have developed tutorials and training courses for their students to teach library, information and Internet skills (<http://www.lib.gla.ac.uk/Training/index.html>).

SELECTED INFORMATION LITERACY PUBLICATIONS 1973–2002

The following publications have been selected from the past three decades to demonstrate trends related to library user instruction and information literacy predominantly in the United States. The publications are listed in chronological order.

Kirk, T. (1973). *Academic library bibliographic instruction: Status report—1972*. Chicago: Association of College and Research Libraries. (ED 072 823).

This is a summary of collected information about bibliographic instruction programs in 174 academic libraries in the United States. The report is divided into formal courses, course-related library instruction, individualized library instruction and miscellaneous types of user instruction and orientation.

Lubans, J., Jr. (Ed.). (1974). *Educating the library user*. New York: R. R. Bowker.

This comprehensive collection of essays, case studies and research reports is related to instructing library users and nonusers in school, public, and academic library settings. Includes information from overviews and surveys to program descriptions and research.

Beeler, R. J. (1975). *Evaluating library use instruction*. Ann Arbor, MI: Pierian Press.

This volume summarizes papers from a conference held December 13–14, 1973 at the University of Denver on evaluating bibliographic instruction. The content of the papers reviews research and psychological aspects of evaluating bibliographic instruction. Included also are summaries of some case studies.

Holley, E. G. (1976). Academic libraries in 1876. *College and Research Libraries*, 37, 15-47.

Points out that for more than a hundred years academic librarians were concerned about teaching users how to use library collections, that librarians are educators and that the library should be the focus of instruction on the campus.

Guidelines for bibliographic instruction in academic libraries. (1977). *College and Research Libraries News*, 38, 92.

Provides the first guidelines for bibliographic instruction in academic libraries, developed by the ACRL Bibliographic Instruction Task Force and approved by ACRL in 1977.

Lubans, J., Jr. (Ed.). (1978). *Progress in educating the library user*. New York: R. R. Bowker.

Provides a state-of-the-art review during the 1970s on providing library use instruction in different types of libraries in the United States, Canada and the United Kingdom. Includes a lengthy bibliography and a directory of library instruction clearinghouses.

ACRL: Bibliographic Instruction Section. Policy and planning committee. (1979). *Bibliographic instruction handbook*. Chicago: American Library Association.

This manual provides basic information and techniques for bibliographic instruction. Includes guidelines, needs assessment guidelines, administrative considerations, objectives, and other planning guides.

Kirkendall, C. (1980). *Reform and renewal in higher education: Implications for library instruction*. Ann Arbor, MI: Pierian Press.

This publication summarizes the papers from the ninth LOEX conference held at Eastern Michigan University in 1979. Discusses various aspects of library instruction and describes different case studies.

Kobelski, P., & Reichel, M. (1981). Conceptual frameworks for bibliographic instruction. *Journal of Academic Librarianship*, 7, 73-77.

Discusses the use of seven conceptual frameworks to organize the content of bibliographic instruction. Includes analysis of cognitive learning theory.

Beaubien, A. K., Hogan, S. A., & George, M. W. (1982). *Learning the library: Concepts and methods for effective bibliographic instruction*. New York: R. R. Bowker.

Addresses concepts, theoretical frameworks and mental thought processes related to bibliographic instruction in higher education. It is a guide for program development and explores education principles in teaching information and library skills.

Oberman, C., & Strauch, K. (Eds.). (1982). *Theories of bibliographic education: Designs for teaching*. New York: R. R. Bowker.

Presents a theoretical foundation for bibliographic instruction and a conception-based learning approach to the teaching of library skills. Includes contributions by various practitioners related to the teaching of library and research skills.

ACRL: Bibliographic Instruction Section. (1983). *Evaluating bibliographic instruction: A handbook*. Chicago: American Library Association.

Provides various types of evaluation methodologies to aid academic librarians in their assessment endeavors.

Tuckett, H. W., & Stoffle, C. J. (1984). Learning theory and the self-reliant library user. *RQ*, 24, 58–66.

Reviews the pedagogical model used by librarians to teach library and information use. Describes an emerging model using cognitive learning theory and problem-solving skills.

Kohl, D. F. (1985). *Reference services and library instruction: A handbook for library management*. Santa Barbara, CA: ABC-CLIO.

Part of this volume summarizes twenty-five years of quantitative research related to library instruction. A subject guide provides access points to allow for the scanning of the enclosed information.

Reichel, M. (1986). Preparing to teach: Bruner's theory of instruction and bibliographic instruction. In A. S. Clark & K. F. Jones (Eds.), *Teaching Librarians to Teach* (pp. 20–31). Metuchen, NJ: Scarecrow Press.

Discusses the use of conceptual frameworks in the teaching of library skills based on Bruner's theory of instruction.

Melon, C. A. (1987). *Bibliographic instruction: The second generation*. Littleton, CO: Libraries Unlimited.

This is a collection of writings instrumental in transforming user instruction from a grassroots movement to an academic necessity. Identified are key issues such as history, development, key concepts, and future concerns during the 1970s and 1980s.

Eisenberg, M. B. (1988). *Curriculum initiative: An agenda and strategy for library media programs*. Norwood, NJ: Ablex Publishing.

Provides school library media specialists with an information skills curriculum designed around an information problem-solving process based on Blooms's taxonomy of cognitive objectives.

Baker, B. (1989). Bibliographic instruction: Building the librarian/faculty partnership. *Reference Librarian*, 24, 311–328.

Demonstrates the need for integrating bibliographic instruction into the research process and cooperating with faculty to accomplish this successfully.

Brevik, P. S., & Gee, G. E. (1989). *Information literacy: Revolution in the library*. New York: American Council on Education.

A college president and an academic librarian collaborated to write this monograph in order to look at the future of higher education in terms of reforming instruction, improving research productivity, building faculty-librarian teams, and increasing teaching and learning effectiveness.

Brottman, M., & Loe, M. (Eds.). (1990). *The LIRT library instruction handbook*. Englewood, CO: Libraries Unlimited.

Provides practical, step-by-step advice to enable institutions to develop programs for library instruction based on sound theory. It promotes some standardization for program development in different types of libraries. Information is provided related to assessment, instructional methods, staffing, budget, and public relations.

Nahl-Jacobovits, D., & Jacobovits, L. E. (1990). Learning principles and the library environment. *Research Strategies*, 8, 74-81.

Discusses the broadest possible application of learning principles to bibliographic instruction. Explains that motivation, response, and reinforcement are necessary components to ensure effective learning.

Nolan, C. W. (Ed.). (1991). *Evaluating library instruction librarians and programs: Case studies*. Chicago: LIRT.

Provides several case studies about librarians and faculty cooperative efforts to evaluate bibliographic instruction outcomes. Includes a variety of questions to further cooperative efforts.

Baker, B., & Litzinger, M. E. (1992). *The evolving educational mission of the library*. Chicago: Association of College and Research Libraries.

This monograph summarizes the results of an ACRL-sponsored think tank meeting resulting in recommendations to link bibliographic instruction with information literacy, to strengthen the library education mission and to reward leadership within the profession.

Hardesty, L. L. (Ed.). (1993). *Bibliographic instruction in practice*. Ann Arbor, MI: Pierian Press.

Provides information on bibliographic instruction from the point of view of students, administrators and faculty. Surveyed collections in 473 college libraries to assess the relationship between the collection strength and assignments resulting from library instruction.

Brevik, P. S., & Senn, J. A. (1994). *Information literacy: Educating children for the 21st century*. New York: Scholastic.

Discusses resource-based learning and how it can develop students to become lifelong learners. Includes information on assessment, curriculum development and teaching methodologies.

Barclay, D. A. (Ed.). (1995). *Teaching electronic information literacy*. New York: Neal-Schuman, 1995.

This how-to-do-it manual was written to help librarians, teachers, and trainers in the 1990s teach access and use of electronic information to users. It addresses the teaching of electronic database use, the Internet and related skills in a variety of ways, including special courses. It also gives information on designing an electronic classroom and how to manage information literacy education.

Shonrock, D. D. (1995). *Evaluating Library Instruction*. Chicago: American Library Association.

This publication, produced by the Library Instruction Roundtable of ALA, discusses types of evaluations and assessments for library instruction. This is a useful guide for librarians interested in assessing library instruction and provides a variety of instruments for such evaluation activities.

Sonntag, G., & Ohr, D. M. (1996). The development of a lower-division, general education, course-integrated information literacy program. *College and Research Libraries*, 57, 331-338.

Describes reforms in higher education as related to information literacy and provides a model at California State University, San Marcos, within the general education curriculum.

Bruce, C. (1997). *The seven faces of information literacy*. Adelaide, Australia: Auslib Press.

Examines information literacy experiences in higher education and proposes a model for information literacy instruction as an alternative to the behavioral model now in use in higher education. Provides new insight and ideas for information literacy education and research.

From library skills to information literacy: A handbook for the 21st century. (1997). Castle Rock, CO: Hi Willow Research and Publishing.

Discusses the teaching of library and information skills to high school students, including information retrieval expertise and active learning activities.

Guidelines for instruction programs in academic libraries. (1997). *College and Research Libraries News*, 58, 264-265.

This represents the final approved version of ACRL's (Association of College and Research Libraries) guidelines for instruction programs in academic libraries including major aspects of user instruction.

Breivik, P. S. (1998). *Student learning in the information age*. Phoenix, AZ: American Council on Education/Oryx Press. (ED 414 861).

Gives an in-depth portrait of resource-based learning used in higher education to prepare students for lifelong learning. Provides examples of

colleges and universities where resource-based learning has been implemented.

Iannuzzi, P. (1998). Faculty development and information literacy: Establishing campus partnerships. *Reference Services Review*, 26, 97–102.

Describes how academic librarians assumed a leadership role in faculty development to address information literacy issues at Florida International University where they built successful partnerships with faculty.

American Library Association. (1998). *A progress report on information literacy: An update on the American Library Association Presidential Committee on Information Literacy: Final report*. Chicago: Author. Retrieved on September 12, 2002, from <http://www.infolit.org/documents/progress.html>.

This is an update of the 1987 report defining information literacy. The progress report summarizes information skills needed for the twenty-first century in terms of experience gained with teaching information skills during the past decade.

Farber, E. (1999). College libraries and teaching/learning process: A 25-year reflection. *Journal of Academic Librarianship*, 25, 171–177.

Surveys the past three decades of library instruction in terms of collaborations between librarians and teaching faculty in liberal arts college settings.

Rader, H. B. (1999). The learning environment—then, now and later: Thirty years of teaching information skills. *Reference Services Review*, 27, 219–224.

Documents thirty years of library instruction, including the first LOEX (Library Orientation Exchange) Conference at Eastern Michigan. Highlights information literacy projects in the national and international arena.

Bruce, C., & Candy, P. (Eds.). (2000). *Information literacy around the world: Advances in programs and research*. Wagga Wagga, New South Wales: Charles Sturt University.

This book addresses many of the issues related to information literacy and challenges the reader to reflect and contemplate on important issues related to research, benchmarking, workplace education, learners' backgrounds, and learning outcomes. Information literacy is addressed from a global perspective and the study includes Australia, New Zealand, South Africa, Sweden, Singapore, Canada, and the United Kingdom.

Deese-Roberts, S., & Keating, K. (2000). *Library instruction: A peer tutoring model*. Englewood, CO: Libraries Unlimited.

This monograph proposes a program of peer tutoring for academic library instruction. It offers an additional learning technique to supplement and enrich the regular information literacy instruction.

Fowler, C. S., & Dupuis, E. A. (2000). What have we done? TILT's impact on our instruction program. *Reference Services Review*, 28, 343–348.

The University of Texas, Austin, created the TILT (Texas Information Literacy Tutorial) to teach a progression of skills through problem-based learning. TILT has been used for several years in undergraduate and distance education. It has also been adapted in a number of academic institutions throughout the United States (<http://.tilt.lib.utsystem.edu>).

Julien, H. (2000). Information literacy instruction in Canadian academic libraries: Longitudinal trends and international comparison. *College and Research Libraries*, 61, 510–523.

Summarizes a national survey of information literacy instruction in academic libraries in Canada. Results indicate that there has been little change during the past five years and only a small percentage of the academic librarians record their objectives and evaluation formally. The results of the survey are compared with an earlier Canadian survey and similar surveys from the United States and New Zealand.

Raspa, D., & Ward, D. (2000). *The collaborative imperative: Librarians and faculty working together in the information universe*. Chicago: Association of College and Research Libraries.

This volume discusses collaborations between academic librarians and faculty in terms of teaching, learning and research. Examples of collaborations on various campuses are provided to demonstrate possibilities for further partnering.

Thompson, H. M., & Henley, S. A. (2000). *Fostering information literacy. Connecting national standards, goals 2000, and the SCANS report*. Englewood, CO: Libraries Unlimited.

This work is aimed at teachers and librarians to help and guide them in teaching information skills throughout the school curriculum. Its purpose is to help teachers understand the importance of teaching information skills to all students. It provides definitions, teaching guidelines, examples of lesson plans, and much more.

Grassian, E. S., & Kaplowitz, J. R. (2001). *Information literacy instruction: Theory and practice*. New York: Neal-Shuman.

This work is a guide for anyone interested in teaching information skills. It provides fundamental instructional plans and development, needs assessment, goal-setting guidelines, as well as instructional theories. It can serve as both a text and reference book for instruction librarians.

Lau, J. (2001). Faculty-librarian collaborations: A Mexican experience. *Reference Services Review*, 29, 95–105.

Documents a relatively new trend in Mexican higher education of building librarian-faculty partnerships. Academic librarians have been working to

educate users in the area of information skills but they face many challenges due to the fact the students enter higher education with little library experience. Describes an exemplary user education program at Juarez University.

Maughan, P. D. (2001). Assessing information literacy among undergraduates: A discussion of the literature and the University of California-Berkeley assessment experience. *College and Research Libraries*, 62, 71–85.

Discusses possibilities for undergraduates to meet outcomes related to the *ACRL Information Literacy Competency Standards for Higher Education*. Describes activities to assess students' information literacy skills at the University of California-Berkeley where seniors have been surveyed since 1994 regarding their ability to find and access information.

Goad, T. W. (2002). *Information literacy and workplace performance*. Westport, CN: Quorum Books.

Defines and describes information literacy in terms of skills needed by people to become information literate in the workplace. Provides an expanded description and gives a sixteen-step model for information related job challenges. Gives directions for lifelong learning and information literacy for the future.

BIBLIOGRAPHIES

This bibliographic review would not be complete without providing a list of bibliographies published during the past three decades dealing with publications related to user instruction and information literacy.

Barrow, D. D. (1991). Hypertext and hypermedia: Resources for school library media specialists. *School Library Media Activities Monthly*, 7, 47–50.

Behrens, S. J. (1994). A conceptual analysis and historical overview of information literacy. *College and Research Libraries*, 55, 309–322.

Reviews the concepts of information literacy by looking at definitions and the range of skills and knowledge required for information literacy over the last two decades.

Bober, C., Poulin, S., & Vilen, L. (1995). Evaluating library instruction in academic libraries: A critical review of the literature, 1980–1993. *Reference Librarian*, 51–52, 53–71.

Discusses reasons for evaluating information literacy, what is evaluated and which methodologies are utilized.

Central Jersey Regional Library Cooperative: Bibliography of Sites on Information Literacy. Retrieved on September 12, 2002, from <http://www.cjrlc.org/Help/infolitsites.html>.

This is a comprehensive list of Web sites related to information literacy in academic and school libraries.

Diehl, S. J., & Weech, T. L. (1991). Library use instruction research and the public library. *Public Libraries*, 30, 33–42.

Summarizes the literature on user instruction in public libraries. It discusses such items as: Public libraries should offer user instruction; patrons of public libraries do not know how to use libraries; and patrons would like to have user instruction.

Doyle, C. S. (1995). Information literacy in an information society. *Emergency Librarian*, 22, 30–32.

This bibliography features references to bibliographic instruction, critical thinking, and information literacy publications.

Edwards, S. (1994). Bibliographic instruction research: An analysis of the journal literatures from 1977–1991. *Research Strategies*, 12, 68–78.

Summarizes a study of the bibliographic instruction literature and found that the volume of publications has increased but the ratio of research to nonresearch publications fluctuates greatly every year. Survey research, evaluation, and experimental research are most often used in library instruction research studies.

Elsbernd, M. E., Campbell, N. F., & Wesley, T. L. (1990). The best of OPAC instruction: A selected guide for the beginner. *Research Strategies*, 8, 28–36.

Reviews library instruction literature from 1980 to 1989. Includes information on the value of OPAC instruction, teaching methods, staffing needs, faculty education, and serving remote users.

Fridie, S. (1994). *Information seeking behavior and user education in academic libraries: Research, theory and practice: A selected list of information sources*. (ERIC ED 371 766).

Lists sources for academic reference and instruction librarians interested in teaching and assisting novice or nonprofessional end-user searchers.

Grassian, E. (1997). *Information literacy competencies—selected items and efforts*. Retrieved on September 12, 2002, from <http://www.ala.org/acrl/nili/competen.html>.

This is an excellent literature review of recent efforts regarding information literacy standards, primarily in higher education.

Hardesty, L. L., Schmitt, J. P., & Tucker, J. M. (1986). *User instruction in academic libraries: A century of selected readings*. Metuchen, NJ: Scarecrow Press.

This work illustrates the historical development of user instruction in academic libraries from 1880 to 1980 by providing summaries of twenty selected publications from this period.

Haynes, E. (1985). Computer assisted library instruction: An annotated bibliography. *Colorado Libraries*, 11, 31–35.

This annotated bibliography includes references to items dealing with computer programs to teach library use.

Hubbard, T. E. (1995). Bibliographic instruction and postmodern pedagogy. *Library Trends*, 44, 439–452.

Discusses how postmodernism can assist in making information studies an integrated part of the academic curriculum.

Iadanza, M. A. (1975). *The development of a bibliography of library skills instructional resources*. Mt. Pleasant, MI: Central Michigan University. (ED 114 085).

This bibliography was compiled to help librarians find methodology to assist library users in using library resources. More than 1000 entries deal with library skills.

Krier, M. (1976). Bibliographic instruction: A checklist of the literature, 1931–1975. *Reference Services Review*, 4, 7–31.

The bibliography is arranged chronologically and includes author, subject and institution indexes. No annotations are given.

Lockwood, D. L. (1970). *Library instruction: A bibliography*. Westport, CN: Greenwood Press.

This is a selective bibliography of materials related to library instruction published before 1970. The list is divided into three groups: Philosophy and state of the art, types of libraries, and methods of instruction; each of these groups is divided into subsections.

Lorenzen, M. (2002). Bibliography of print resources on library instruction. East Lansing, MI: Michigan State University. Retrieved on September 12, 2002, from <http://www.msu.edu/~lorenze1/>.

This is a list of approximately 300 print publications on library user instruction divided into history, active learning, teaching methods, international, issues in higher education, and technology.

Morris, J. M. (1980). *Bibliographic instruction in academic libraries: A review of the literature and selected bibliography*. (ED 180505).

Provides an overview of bibliographic instruction in academic libraries, an indexing language for literature searches and a bibliography of 174 items.

Reichel, M. (1991). Refocusing and library instruction. *RQ*, 30, 497–501.

Reviews library literature to outline new trends and ideas for instruction librarians. Focuses on user needs for library instruction.

Ridgeway, T. (1990). Information literacy: An introductory reading list. *College and Research Libraries News*, 7, 645–648.

Provides a definition of information literacy, explains the need for coalitions to bring about national information literacy and highlights major publications on these topics.

Schwartz, P. J. (1973). *The new media in academic library orientation, 1950–1972: An annotated bibliography*. Stout, WI: University of Wisconsin. (ED 071 682).

Presents a review of the literature in the area of academic library orientation from 1950–1972. It is arranged by author and by source to assist the literature searcher.

Shih, T.-C. (1986). *Library instruction: A bibliography, 1975 through 1985*. Jefferson, NC: McFarland.

This unannotated listing of library instruction publications is arranged in four sections, general, academic, public, and school libraries. It includes an author, title, and keyword index.

Tucker, J. M. (1980). *Articles on library instruction in colleges and universities, 1876–1932*. [Occasional Paper 143]. Urbana, IL: University of Illinois, Graduate School of Library Science.

This annotated bibliography lists journal articles on library use instruction in academic institutions in the United States from 1876 to 1932. Provides an historical view of library instruction.

UMass Information Literacy Project: Bibliography. (1997). Dartmouth, MA: University of Massachusetts. Retrieved on September 12, 2002, from <http://www2/lib/umassd.edu/library2/INFOLIT/ilbib.htm>.

This comprehensive bibliography is intended for academic librarians, computer services professionals, and faculty interested in developing an information literacy program on a college campus. It addresses how to implement information literacy programs in terms of critical thinking, outcome assessment and curriculum materials.

Yaple, H. (1976). *Programmed instruction in librarianship: A classified bibliography of programmed texts and other materials 1960–1974*. [Occasional Paper No. 124]. Urbana, IL: University of Illinois Graduate School of Library Science.

Identifies programmed materials for library education from 1960–1974. Contains programmed texts designed to instruct graduate students in various library programs. The entries are not annotated.

CONCLUSION

This brief literature and Web survey shows a high interest in information literacy throughout educational communities in the United States and in other countries. Although librarians have been dealing with information skills training for several decades, teachers, faculty, and employers are becoming interested in teaching people appropriate information and technical skills for improved learning and job performance. The most recent publications are no longer mostly in the education and library literature but in business and other disciplines. There are many documented activities in this brief survey where information skills are taught in schools and academic institutions. However, more librarians will have to address additional challenges related to information literacy to ensure that they assume a leadership role in educating students and preparing them for a productive life.

REFERENCES

Goad, T. W. (2002). *Information literacy and workplace performance*. Westport, CN: Quorum Books.

ADDITIONAL READINGS

American Association of School Librarians and Association for Educational Communications and Technology. (1998). *Information power. Building partnerships for learning*. Chicago: American Library Association.

Association of College and Research Libraries. (2000). *Information literacy competency standards for higher education*. Chicago: Association of College and Research Libraries.

Rader, H. B. (1974). Library orientation and instruction—1973. *Reference Services Review*, 2, 91–93.