

Trends in Library and Information Science [trends]

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ABSTRACT

Based on a content analysis of professional journals, conference proceedings, ERIC documents, annuals, and dissertations in library and information science, the following current trends in the field are discussed: (1) there are important emerging roles and responsibilities for information professionals; (2) the status and image of librarians remains a major concern across the library professions; (3) professional education programs are being challenged to balance the need to provide training in specific areas while also developing comprehensive, coordinated programs covering all areas of information science; (4) libraries of all types are incorporating planning processes into their management activities; (5) "Information Power," the new guidelines for school library media programs, is already having a major impact on the field; (6) technology has an impact on the presentation of information and related information services; (7) advances in technology result in major, highly visible changes in library and information work; (8) new research efforts in information systems include integrating various formats and structures in a single system, developing sophisticated user interfaces, and the application of artificial intelligence to information systems; (9) CD-ROM has emerged as a major technology for providing access to a range of information systems, such as bibliographic retrieval systems, databases, library catalogs, and full-text systems. (11 references) (MES)

TEXT

This digest is based on TRENDS AND ISSUES IN LIBRARY AND INFORMATION SCIENCE, by Michael B. Eisenberg, Carolyn K. Trombly, and Lindsay D. Ruth.

In order to identify and document the pervasive trends in the field of library and information science, an elaborate content review of the professional literature was performed. Literature examined included journals, conference proceedings, ERIC RIE documents, annuals and yearbooks, and dissertations. The purpose of this digest is to

highlight the significant trends observed in this content review process.

TRENDS IN THE LIBRARY AND INFORMATION PROFESSIONS

There are important emerging roles and responsibilities for information professionals. Two themes related to the expanding roles of information professionals are (a) the need for librarians to take a proactive approach to some of their traditional activities, and (b) the possibilities for information professionals to take on new roles, which are often stimulated by emerging information technologies. Librarians are encouraged to reinterpret "traditional" library skills, to explore new ways of putting those skills to work, and to promote themselves to administration. Models for "electronic libraries" show librarians taking responsibility for the provision and management of information that comes not from traditional collections, but from databases.

The status and image of librarians remains a major concern across the library professions. In spite of emerging new roles, all types of librarians are still concerned with image. Aspects of this include librarians' image of themselves, their image in society, and their image among users. There is continuing concern about the status of librarians in relation to that of information managers, information scientists, and other professionals under the "information" umbrella. Establishing a unified identity, within such a varied profession, is a major concern, as is creating a positive image that accurately reflects the skills and responsibilities of library and information professionals. Professional education programs are being challenged to balance the need to provide training in specific areas while also developing comprehensive, coordinated programs covering all areas of information science.

Questions facing professional education in library and information science include: What is information science? How can seasoned practitioners maintain currency and extend their competencies? What prerequisites should exist for those entering the field? What do prospective employers expect from graduates of various programs? What should schools teach to prepare their graduates for productive employment, both now and in the future? (Cooper & Lunin, 1988). Educators must meet specific job market needs, but they also feel a responsibility to provide students with an introduction to a broad information world. Changes in library and information science programs reflect attempts to achieve both goals.

Libraries of all types are incorporating planning processes into their management activities. The library field as a whole shows a strong interest in planning. Numerous conference workshops and articles in the literature address planning. This includes planning for specific services as well as planning for long range organizational development (strategic planning). A strategic plan provides a foundation for making choices about future library directions (McClure, Owen, Zweizig, Lynch, & Van House, 1987). Repeated themes in the literature include the need to plan for change, to anticipate future needs and restrictions, and to take a proactive stance toward environmental factors.

INFORMATION POWER, the new guidelines for school library media programs, is already having a major impact on the field. The major development in 1988 in terms of

standards was the publication of the new school library media guidelines, INFORMATION POWER (AASL & AECT, 1988). This document presents an active, forward-looking role for library media programs based on the library media specialist functioning as information specialist, teacher, and instructional consultant. Discussions of the guidelines are just beginning to appear in the literature; however, the document has already been presented to educators at all levels.

TRENDS IN INFORMATION TECHNOLOGY

Technology has an impact on the presentation of information and related information services. Technology influences change in the structure and format of information resources. Traditional formats for government publications, library catalogs, thesauri, microforms, bibliographic sources, and even monographs are being challenged by computer-based alternatives. Computer-based information resources are still in a state of infancy. Attention is just beginning to be placed on full-text information sources, computer databases that combine multi-media formats, and computer-based hypermedia information stores that combine text, sound, graphics, and moving pictures and are interconnected through multiple points of access for a great degree of user interaction. There is also increased reliance on automated systems for library services and operations such as acquisitions, networking and interlibrary loan, serials control, catalogs, and reference services.

Advances in technology result in major, highly visible changes in library and information work. As CD-ROM and other hardware and software systems appear and are applied in various environments (from schools to corporations), the focus in the literature goes beyond the technologies themselves to a consideration of the impact of various technologies. Every type of library and information setting is affected by technology. Discussions in the literature address the need to reinvent the library in the information age, scholars' management of information, the impact of technology on scholarship, and the implementation of technological change. A major issue in higher education is the relationship between the library and the computer center in providing information services on campus. Another is the impact of technology on curriculum and resource management in colleges. In other settings (archives, school library media centers, public libraries, and information services in business and government), services and management are similarly influenced by technological change.

New research efforts in information systems include (a) integrating various formats and structures in a single system, (b) developing sophisticated user interfaces, and (c) the application of artificial intelligence to information systems.

In an opinion paper, Sparck Jones (1988) identified these three trends in information management and systems development. Integrated formats and structures refers to systems that include a variety of media (text, pictures, graphics) and document types (reports, papers, tables, charts, letters, user comments). Developments in user interfaces include increased workstation capabilities, multitasking, linked operations, flexibility and convenience, multiple windows, pull-down menus, and hypermedia. Artificial intelligence applications are going beyond the interpretation of natural language

queries or text, to systems that expertly interpret information from a context of broad knowledge bases in fundamental areas.

CD-ROM has emerged as a major technology for providing access to a range of information systems, such as bibliographic retrieval systems, databases, library catalogs, and full-text systems. Optical disk technology in the form of CD-ROM is clearly the technology of the present. The literature is filled with discussions of new CD-ROM products, the application of CD-ROM in new situations, and research and development to expand CD-ROM capabilities (Lunin & Schipma, 1988). Current CD-ROM products include bibliographic databases, online catalogs, and full-text reference sources. Research and development efforts involve interchangeable architectures, multi-user access through networking and other means, and transparent access across software systems. CD-ROM is viable and being applied in all types of libraries, in business and government situations, and across subject areas.

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