INTRODUCTION

The twentieth annual Clinic on Library Applications of Data Processing was held April 24-26, 1983, at the Illini Union, University of Illinois at Urbana-Champaign. The Clinic theme emphasized the human side of library automation: professional competencies required to make effective use of new information technologies. The papers included in this volume consider how professional roles and responsibilities have been and are being affected by technological change and what competencies are important in filling these roles. In addition, approaches to training and education to develop competencies are explored.

In her paper presented as the keynote address of the conference, José-Marie Griffiths provides a framework from within which to consider the papers which follow. Describing progress on a study for the U.S. Department of Education to determine the present and future competencies needed by library and information professionals, she notes the need for communication among information service organizations (including libraries), professional societies, and education and training organizations. Competencies are defined as comprising one or more of the following components: knowledge, skills and attitudes.

New technologies are affecting activities in both technical and public services in all types of libraries. Kathryn Luther Henderson provides a detailed review of how technology is changing approaches to acquiring, organizing and preserving library materials, "the most typical of the activities of libraries." Drawing from a review of the literature, a survey of individuals working in technical services positions, and an analysis of position announcements, she considers competencies in two broad categories: (1) general, technical and bibliographic; and (2) managerial, supervi-

sory and communicative. Danuta A. Nitecki also draws upon a review of the literature and an analysis of position announcements in her discussion of competencies required of public services librarians. In her view the competencies required—i.e., to communicate with others, to analyze needs, to retrieve data, to instruct users, to manage operations and supervise staff who provide services—are the same whether or not automated resources are used.

Three papers consider the competencies required by professionals working in different types of libraries. Reflecting on "The Public Librarian of the Last Years of the Twentieth Century," Richard T. Sweeney enumerates six new competency areas for public librarians: (1) managing information technology; (2) keeping informed about the state-of-the-art of specific information technologies; (3) monitoring future or developing information technologies; (4) analyzing information-seeking behavior; (5) understanding the societal issues that develop from the information technology; and (6) building knowledge bases. In her paper on "Technology and the Academic Library Staff or the Resurgence of the Luddites," Carolyn M. Gray emphasizes the importance of people in the successful planning and implementation of library automation. Pointing out the kinship of special librarians with the one-man band, Hillis L. Griffin illustrates some of the unique challenges in the one-person library as "Special Librarians Face the New Technology."

In-service training, graduate professional education and professional societies can all contribute to the development of competencies. Linda Baskin and Mima Spencer provide specific guidelines for "Training Staff to Use Computers." Drawing from their experience as trainers, they share their insights on how learning about computers differs from and is similar to other training. In "Education Matters," Evelyn H. Daniel describes three models for change in library/information educational programs: incremental, conceptual/futurist, and skill-oriented. She illustrates the advantages and disadvantages of the competency-based approach for education by describing the process by which the School Media Specialist/Computer Task Force at Syracuse University identified competencies for the building-level computer coordinator in schools. In her paper on "The Role of the Association in Developing Professional Competence," Julie Carroll Virgo discusses multiple roles: highlighting "good" or innovative practice, setting educational standards, providing an environment where leadership and group skills can be developed, providing opportunities to learn new technical skills or knowledge and to exchange ideas, disseminating information, and providing continuing education programs. She also introduces a number of challenges and constraints facing associations and suggests directions for future association efforts.

Recognizing the growing involvement of libraries of all types in networking and cooperative activities, Jo An S. Segal concludes the papers in this volume with a discussion of "Competencies for Library Networking and Cooperation." In her view, competencies for librarians working in cooperative agencies fall in seven categories: communication theory and practice, teaching and training competencies, mastery of the field of librarianship, knowledge of specific systems which form the basis for the service of the agency, business administration, planning ability and skills, and clarification of values. She also identifies competencies necessary for librarians in order to make them effective users of networks and of library technology.

Although the speakers at the Clinic were drawn from organizations in the United States, the topic of professional competencies in relation to technology is of concern wherever new information technologies are being applied to library and information work.[1] Similarly, the topic should be of interest to information professionals with varying responsibilities: faculty of graduate professional programs, others involved in training and education, administrators concerned with staff development, and individuals seeking to fill positions which make use of technology. Earlier volumes in this series of Clinic proceedings have documented the many ways in which computers and other information technologies are being used in libraries and related information services. It is hoped that the present volume, with its focus on the human factor, will encourage consideration of how best to develop our human resources to make effective use of technology for human ends.

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Editor

REFERENCE

1. See, for example: Wight, Tony. *A Discourse on Issues: An Exploratory Study of the Implications of Information Technology for U.K. Library & Information Work Manpower Planning* (British Library Research and Development Report No. 5656). London: Aslib Research & Consultancy Division, 1980.