
EDUCATION FOR LIBRARIANSHIP: A SURVEY OF THE LITERATURE, 1988-1995

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Introduction

Clarion University of Pennsylvania's Department of Library Science (DLS) has been offering an accredited Master of Science in Library Science degree since 1976; the program has been reaccredited twice since its original accreditation, and recently completed the process of self study associated with an accreditation visit in the spring of 1996. This was an exciting time for the Faculty of the DLS, especially since it was the first time that the Faculty used the new Standards for Accreditation of Master's Programs in Library and Information Studies (Office, 1992). One of the hallmarks of the new accreditation standards is their emphasis on "broad-based, continuous program planning, development and improvement," (Office, 1992, p. 3) and their emphasis on "systematic planning process[es]" (Office, 1992, p. 11. Additionally, the new standards emphasize the need to develop a curriculum which "reflects the findings of basic and applied research from relevant fields," and which takes into account "the statements of knowledge and competencies developed by relevant professional organizations" (Office, 1992, pp. 11-12). Since 1983, the DLS Faculty have utilized a five-year process of continuous curriculum revision which begins with a comprehensive search of the literature about education for librarianship and competencies needed by librarians. Following is a summary of the competencies and suggested curriculum components which were indicated in the literature about librarianship, 1988-1994.

Library Science Graduate Programs

Literature about graduate education in library science points to a definition of the process as a "pluralistic," — i.e., interdisciplinary and diverse — mix of multiple traditions, standards, methods, and userneeds (Robbins, 1990; Lowry, 1990; Tees, 1991; Bradley, 1993; Koenig, 1993; Ostler, 1995) within which there exist theory (Boyce, 1994) and skills which should be mastered by all MLS graduates, and whose content should

be placed within international (Fang and Nauta, 1991; Tallman, 1991; Kibirige, 1993) social, economic, cultural, and political contexts (Association of College and Research Libraries, 1992; Sineath, 1992). It is stressed that this process of integration will help to assure that library professionals have a common focus (Oen and Cooper, 1988), pride in their accomplishments (Martin, 1995), and a leadership, self-confident mentality (Penniman, 1991; White, 1995). In addition, the knowledge gained in library school should be applicable at an entry level to a variety of library environments (Preschel, 1988; "Dean's...", 1994). Some writers debate the need for certification of librarians (Ford, 1989; Lindberg, 1990; Kaatrude, 1992; Martin, 1994); others stress the need to provide library school students with field experiences, or internships which provide on-the-job training (Meiseles and Feller, 1994) and which also can be used as recruitment vehicles for minority students (Diaz and Starkus, 1994; Kendrick, Lipkind, and Clinkscapes, 1990). Curricula must keep up with new technology (Kaula, 1988; Hurd, 1988; Main, 1990; Sharma, 1992; George, 1994) and that they should include the following components: discussion of ethics (Rogers, 1994) and issues such as equal access to information (McCook, 1992b); balance of theory and practice (Clack, 1993; Curras, 1993); systematic study which integrates basic knowledge and skills into a unified structure (Eisenberg, 1991; Intner, 1991); study of communication theory (Lester, 1993); recognition of the impact of information on individuals and institutions (Anderson, Belkin, Lederman, and Saracevic, 1988); and a holistic approach to integrating knowledge and analysis with professional values (Mayfield, 1993).

It is further stressed that education for librarianship should recognize diverse learning styles and cultural behaviors among students and library patrons (Alire, 1988; Lenox, 1993a; Lenox, 1993b; Brennan and Sullivan, 1989; Varlejs, 1993/94; Chu, 1994; Hannigan, 1995), especially in terms of information technology education (Johnson, 1991); and that library schools should develop recruitment programs aimed at increasing diversity among library school students and faculty (Miller, 1991; Speller,

1991; Foderingham-Brown, 1993; McCook, 1993; "Deans....," 1994). Library schools are also urged to recruit and mentor minority students (Abdullahi, 1991) while still maintaining a local perspective on what constitutes a minority hire (Anderson, 1994). Finally, the need for library education to continue beyond the MLS is also emphasized (Nicholson and Bridgeland, 1991; Berry, 1993; Schneider, 1994; Weingand, 1994), especially regarding standards for continued competence and excellence (Weingand, 1991), as well as ability to change (Makinen, 1991). Regarding preparation for library school, practitioners agree that a basic grounding in a variety of disciplinary areas is an advantage (Hayes, 1988). Related to preparation is the issue of how potential students choose a library school; recent research indicates that, in order of importance, students choose library science graduate programs on the basis of their accreditation, cost, options and facilities, technology, specializations, and faculty (Berry, 1994).

Appropriate venues for graduate library science education is a topic which is also discussed in the literature, most often in terms of the best way to provide distance education. Examples of distance education can be found in the literature; many describe the use of interactive television (i.e., "Graduates earn MLS," 1994). Some articles discuss the advantages of distance education such as increased enrollment for the library school (Roper, 1991) and increased student autonomy (Holmberg, 1991); other articles list disadvantages, especially in terms of concerns about quality control for courses taught off-campus (Miller, 1991) and evaluation of students at off-campus locations (Louw, 1994).

Core Curricula

The literature regarding core curricula categorizes core knowledge and skills into several broad areas:

1. Management, or the ability develop, maintain, and market a library or a specific library service which meets current needs and is able to anticipate and respond to future needs. Within the area of management, library professionals specifically suggest that MLS graduates must be able to market library and information services (Lester, 1993), employ effective time management strategies (Heyser and Heyser, 1989), apply appropriate finance and budgeting skills (Tchobanoff and Price, 1993), think conceptually (Evans and Tipton, 1992), work in groups (Lester, 1993), and evaluate and apply research to decision-making tasks (Connell, 1992).

2. Communication and interpersonal skills, or the ability to transmit information and services which are appropriate and appropriately formatted for a specific audience, and which reflect professionalism and competence. Specific competencies often cited in the areas of communication and interpersonal skills include writing skills (Jul, 1990; Massey-Bursio, 1991); public relations skills (Fisher and Matarazzo, 1993); ability to clearly articulate ideals, principles, concepts and policies (Grey, 1991);

ability to understand and communicate with diverse populations (Freiband, 1992); and ability to apply critical thinking skills (Miller, 1990) and personal transferable skills which are not specific to any one subject or discipline (Gash and Reardon, 1988; Dumont, 1989). Venues for teaching these skills via video are well covered in bibliographic resources (Arthur, 1992).

3. Information theory and practice, or the ability to select, acquire, organize, and use information resources in all present formats, and the ability to quickly learn to select, acquire, organize, and use information resources which appear in new formats. In the area of information theory and practice, some library professionals argue that theory should be emphasized in graduate school since practice varies according to institution and information resources used (Carpenter, 1991; Avram, 1991). Among the many specific competencies discussed are ability to acquire, evaluate, organize, and use information and information resources (Fisher and Matarazzo, 1993), including online systems and resources (Settel and Marchand, 1988; Preschel, 1988; Stam, 1992); computer literacy, including knowledge of information systems and their effective management (Tassia, 1990); understanding of a library's environment and its role within that environment (Association of College and Research Libraries, 1992); knowledge of information handling technologies, methods, and techniques, including research techniques (Garrison, 1988); and an understanding of information science as a distinct discipline (Moll and Flood, 1988). Most recently, literature has begun to focus on a new definition of information as a monetary commodity (Cory, 1994).

4. Foundational concepts and skills, or the ability to apply a clear understanding of the profession and its "body of knowledge" to the practice of the profession, both now and in the future. A foundational body of knowledge and skills which all MLS graduates should understand is often couched, in the professional literature, in terms of basic areas of competency, whose theory and practice all MLS graduates should master. These include transferable skills (Lester, 1990); reference theory and practice (Heyser and Heyser, 1989); cataloging and bibliographic control theory and practice (Gorman, 1992); acquisitions and collection development theory and practice (Otero-Boisvert, 1993; Budd and Brill, 1994); circulation theory and practice (DeLuise, 1994); and conservation and preservation theory and practice (DeLuise, 1994). Additionally, an understanding of the basics of facilities planning (DeLuise, 1994), and knowledge of computer applications, technology, and information science (Pemberton, 1990; Stam, 1993) are stressed as important.

"Elective" Curricula for Specialist Education

The professional literature seems to be quite clear on the issue of specialist education. The preponderance of articles dealing with unique competency requirements for specific types of librarians indicates that a "core" education is not enough to

adequately prepare an MLS graduate. In addition to the acquisition of core competencies, the library literature identifies several specialist areas within the profession which require "elective" competencies, or competencies which an MLS student "elects" to master, based on her/his individual employment goals.

School Library Media Specialists/Librarians Serving the Needs of Children. In addition to the core competencies outlined above, school librarians should possess some form of certification (Perritt, 1994). It is also emphasized that school library media specialists must have an understanding of the behavior and psychology of children and young adults (C. Evans, 1993); the development of language and reading skills in children and young adults (Greene and Cullinan, 1988); curriculum design, teaching strategies, cognitive development, and educational theory (Tassia, 1990); and instructional analysis and testing methodologies (Evans and Tipton, 1992). A unique sensitivity to the needs of children and young adults is also heralded (Behrman and Vogliano, 1991), as is an awareness of the changing dynamics of family life and the impact of family on children and young adults (Lewis, 1993). Additionally, that school librarians must be familiar with and able to use video and digital materials (Evans and Tipton, 1992); must understand the impact of media on children (Fasick, 1990); must be able to plan educational programs for all types of children, including disabled children and children from ethnic and minority groups (Coffeen, 1989); should be able to provide parent education (Greene and Cullinan, 1988); and must have an attitude toward their responsibilities that empowers children to learn (Behrman, 1991). Library science faculty are urged to instill in students a commitment to continuing professional education (Adams, 1994), and a belief in the centrality of the media center to a school (Eisenberg, 1991). Faculty are also urged to teach students how to persuasively demonstrate the effectiveness and impact of a school library media program and to support professional associations at local, state and national levels (Barron, 1993a; Barron, 1993b). Field experience is strongly recommended (Tassia, 1990), and if this is not possible, simulated teaching exercises via interactive video are suggested as alternatives (Abed, 1988). Regardless of field experiences, school librarians are expected to complete supervised internships (Hempstead, 1988). For public librarians serving the needs of children, necessary competencies include knowledge of children's reading interests and abilities, knowledge of children's literature and children's information needs, programming skills, and advocacy skills (Immroth, 1991; Elkin, 1992).

Public Librarians. The Public Library Association's "Entry Level Public Librarian Competency Statement" states that public librarians must have, in addition to the core competencies outlined previously, knowledge of: 1) the legal, structural, organizational, and regulatory environment of public libraries; 2) the unique nature of a public library's mission and role; 3) the role of services and programming in a public library; 4) community structures and public policy mechanisms; and 5) the

governance structures within a public library. Additionally, it is stressed that public librarians must possess a well developed code of professional ethics. As was the case with school librarian competencies, field experience in the form of a structured practicum is highly recommended (Lester, 1994). And, the ability to provide programming and services for adult learners is also suggested as important (Duval and Main, 1993).

Reference/Research Librarians. Reference and research librarians are particularly urged to: be able to use research and evaluation methods (Shonrock and Mulder, 1993); understand the research process (Jones, 1991); possess broad and rigorous undergraduate training (McCook and Gonsalves, 1993); be able to provide effective bibliographic instruction which is based on knowledge of many subject areas and teaching strategies, as well as on an understanding of scholarly communication patterns (Mandernack, 1990; Petrowski and Wilson, 1991; White, 1991); be able to conduct effective reference interviews (McMurry, 1988) and develop effective reference search strategies (Collins, 1990); and possess the ability to deal with disruptive elements in the library (Cole, 1993). Library school faculty are especially urged to prepare reference librarians for the ambiguities and frustrations of working at a reference desk, including constant interruptions, committee overload, and unrealistic time constraints (Walker, 1990). Additionally, peer coaching is recommended as an effective instructional technique (Leven and Frank, 1993).

Catalogers. In addition to emphasizing that catalogers must be instructed on the theories of bibliographic organization (Trainer, 1989) and indexing (Ballard, 1993), writers in the library literature also emphasize the need to instruct catalogers in the following areas: national standards for bibliographic control (Clack, 1993); foreign language skills and the ability to use automated cataloging systems (A.F. Evans, 1993); MARC record formats (Callahan and MacLeod, 1994); and understanding of cataloging from a "nuts and bolts" perspective, as well as the standpoint of analysis, synthesis and evaluation ("Cataloging librarians address staffing needs," 1989). The ALCTS's Committee on Education, Training, and Recruitment for Cataloging identifies the following elements for a training program for entry level catalogers: logistics and organizations of technical services departments and libraries, personnel issues, electronic cataloging, continuing education opportunities, descriptive vocabulary, MARC format, local cataloging practices, access points, subject headings, classification and shelving, authority control, online catalog maintenance, and dealing with special formats ("Essential...," 1994). Finally, cataloging practitioners agree that it is important for catalogers to develop a sense of priorities about cataloging, especially in an interdisciplinary world (Curran, 1995) which derives from a complete understanding of the purpose and theory of cataloging (Intner, 1990), and that catalogers should engage in continuing education (Powell, 1988) and preprofessional internships (Riemer, 1993).

Collection Development Librarians. MLS graduates should possess knowledge of: publishing processes, vendors and jobbers; serials acquisition and control; legal issues (especially copyright); resource sharing; collection evaluation techniques; and preservation techniques. It is also recommended that graduates possess the ability to write a collection development policy (Budd and Brill, 1994); that bibliographers possess subject-specific knowledge of subjects, authors, and titles (Williams, 1991); and that on-the-job training be used to complement classroom education (Schmidt, 1991).

Science and Technology Librarians. In addition to the competencies that all MLS graduates should achieve, the literature indicates that science and technology librarians must be able to evaluate information for quality, currency, and relevance to a specific problem, and that they must have knowledge of the research habits, work context, and information gathering techniques of scientists and engineers (Stuart and Drake, 1992). It is also emphasized that in order to obtain a working knowledge of the literature of science and technology, MLS students should be taught by faculty who have experience with science and technology (Vazakas and Wallin, 1992). Finally, science and technology librarians must be creative in their assumption of leadership roles in the information profession (Storm, 1994).

Medical and Health Science Librarians. In general, the literature about competencies for medical and health science librarians emphasizes the concept of medical informatics, or the applied use of information science for medical information problems (Ball, Douglas and Lunin, 1988; Detlefson, 1993), as well as the recommendation that health information professionals be employed as faculty to teach potential health information professionals (Creth, 1993). It is further stressed that subject-based expertise is critical (Ekstrand, Ladner, and Olds, 1990). The Medical Library Association provides guidelines for teaching medical and health science librarians which include the need to instruct students in medical concepts and terminology, the information needs of health professionals, medical cataloging and classification schemes, medical bibliography, and the health care environment (Roper and Mayfield, 1993). Recently, the National Library of Medicine reported that MLS graduates must: be able to apply new information technologies to health care; utilize an interdisciplinary approach to providing health care information; understand the importance of networking; be familiar with and recognize the importance of the Joint Commission on Accreditation of Health Care Organizations' standards for management of information; use media and telecommunications technology to provide remote access to medical data for medical facilities without libraries; develop and utilize quantitative and qualitative measures of the value of information services for health care; and possess knowledge regarding patient education materials, clinical practice guidelines, decision support systems, and computer-based patient records systems (National Institutes of Health, 1995).

Law Librarians. The American Bar Association standards for law librarians require that they possess either a degree in law or in library science; the Association of American Law Schools standards require both degrees in addition to certification through the Association (Bonney, 1991). It is generally agreed that law librarians and directors of law libraries should and do possess legal and library education (Slinger, 1988; Hazleton, 1993).

Corporate Librarians. Corporate librarians must: be able to prioritize information requests, understand the need to deliver information in a timely fashion, recognize the importance of information that is generated within the parent institution, possess a service attitude and a focus on information users as "customers," understand the general principles of business and management (Kendrick, 1990; Tchobanoff and Price, 1993), market library services (Butcher, 1989), and synthesize competitive intelligence information (Dou, 1993). As special librarians, they must also be knowledgeable about specialized document forms such as preprints, patents, and standards (Godert, 1987), must have subject background and business savvy (Cronin, Stiffler, and Day, 1993), and must possess an educational background which effectively integrates business, management, and library theory and practice (James, 1989; Willner, 1993). A survey of Canadian special librarians distills these competencies into three broad areas: information-related and technological skills, management skills, and attitude skills (MacFarlane and Tees, 1993).

Visual Resources Librarians. The literature recommends that library science faculty teaching in this area hold the MA in art history (Robertson, 1991); that MLS graduates enroll in graduate coursework in art (Mahard, 1994), including dual master's degree programs in art and library science (Irvine, 1994); and that MLS graduates complete coursework and continuing education dealing with visual resources, slide librarianship, database creation, image technologies, and automation of art libraries and collections (Jacoby, 1992; Stam, 1993; Boaden, 1994; "Continuing..." 1994; Williamson, 1994). As with other specialties, it is also recommended that students complete internships in art libraries (Blank, 1992; Tucker, 1994). Also emphasized is the need for library science faculty to encourage new audiovisual librarians and archivists to develop standards for treatment of audiovisual resources (Turner, 1991), and to provide specialized art librarianship courses within the library science curriculum (Robertson, 1994; Todros, 1994).

Music Librarians. Music library practitioners recommend that MLS graduates who wish to work as music librarians have an undergraduate degree in music, that they be able to read music and understand musical styles, and that they possess foreign language skills and a knowledge of music history (Carobine, 1991). It is also suggested that entry level music librarians possess knowledge of music printing and engraving, the structure of music publishing and distribution industries, and cataloging of music materials (Sommer, 1988). Finally, the importance of being able to utilize electronic databases of music scores and sound recordings is stressed (Duggan, 1993).

Library Systems Analysts / Systems Librarians.

Competencies necessary for systems librarians include: the ability to select, install, maintain and analyze integrated systems; advanced knowledge of microcomputers; knowledge of networking and local area networks; knowledge of CD-ROM technology; familiarity with mainframe computers; knowledge of the Internet; the ability to program; understanding of information technology; ability to analyze information systems; and knowledge of automated bibliographic control systems (Boyce and Heim, 1988; Burtle, 1994).

Continuing Education

The topic of continuing education is very well represented in the library literature about education for librarianship. Continuing education constitutes, in its most formal form, established coursework (both elective and core) within a library school's program; it also comprises informal educational opportunities such as group discussions and sustained professional reading (Washington, 1989; C. Evans, 1990; Boydston, 1992; Latrobe, 1992; Sager, 1993). Other delivery mechanisms for continuing education include mentor programs (Corbin, 1988), satellite programs (Lynch, 1994), in-house lectures ("Free Library...", 1988), journal clubs (Jones, Richmond, Christopher, and Duggar, 1993), library tours (Keally, 1993), participation in and recognition of the importance of professional association activities (Stussey, 1988; Curry, 1992; T.W. Miller, 1992; Richman-Scott, 1993), workshops (Redfield, 1988), and videotaped seminars (Halsted and Goldstein, 1990). Continuing education is particularly heralded in the literature as an effective way to reach individual and specialized populations such as adult learners, small business owners, and ethnic and cultural minorities (Ezell, 1990), and as an effective vehicle for integrating new employees into the structure of large libraries (Grunling and Sheehy, 1993), thus helping to create a sense of common purpose and shared vision (Nelson, 1993).

In addition to topics already identified as necessary for core curricula, writers indicate the following topics as being particularly appropriate for continuing education opportunities: research techniques and publishing venues (Wright, 1993), medical informatics ("NLM grant...", 1992), leadership development (Fineberg, 1993), acquisitions (Thomson, 1994), advanced collection management techniques (Axtmann, 1994), advanced cataloging management techniques (Nevin, 1994), advanced bibliographic instruction techniques (Burnam, 1993), and records management (Nawe, 1991).

Regardless of the type of continuing education being offered, library practitioners indicate that continuing education opportunities must take into account the motivations, qualifications, and learning or teaching styles of participants (Burgin, 1992) and trainers (Bellardo, 1988; Mulder and Dayton, 1994), and that in order to be effective, continuing education must be accompanied with institutional supports (Havener and Stolt, 1994) and incentives (Segal, 1988).

Conclusions

Overall, the professional library literature about education of librarians points in the right direction, but avoids direct attention to some of the major issues which today's librarians face. The literature indicates that the world of librarianship is poised on the edge of a technological revolution. This is not totally accurate. The world of librarianship is not poised at the beginning of monumental change, rather it is in the midst of a globally cataclysmic technological, economic, cultural, and information revolution which has successfully obsolesced old "truths." The very heart and soul of librarianship are being catapulted into a new state of being. Consider, for example, traditional cataloging classification schemes and the conspectus approach to collection evaluation and development; these approaches are seriously compromised by the interdisciplinary nature of information in the world of Internet and hypertext mapping. Or, consider the prevailing characterization of libraries as non-profit institutions. This "truth" is also seriously jeopardized by rapid global economic change which imbues useful information with significant real monetary value.

Even the definition of "the library" has changed. Traditional definitions of "the library," while still valid, are no longer enough. In part, this is because too much of the world's population does not have access to a traditional library. And, traditional libraries cannot provide the diverse and multicultural resources necessary to adequately support the information needs of a world which is no longer divided into discrete physical, political, social, or cultural units.

The very essence of an information unit is redefined by a geometrically increasing electronic information environment which is characterized by too much, rather than too little input, and which increases the output of information to overwhelming proportions. And, perhaps most cataclysmic is the tangible technological demarcation line which divides the information "haves" and "have-nots" into groups that define a person's lifetime ability to achieve. The world of today's librarian is not a "changing" world; it is a "changed" world. Within this context, library educators must provide new definition to the goals of library education which are reflected in the professional literature.

Inasmuch as the literature of a profession mirrors the current and future realities of its practice, the literature of librarianship seems to indicate a clear direction for library education, even if the reasons cited do not totally take into account the current realities of the information world. Library science educational programs must be visionary, they must include students who do not attend classes at a specific physical facility, and they must be able to change quickly as they embrace new paradigms for the profession. In order to do this, educational programs in library science must:

- 1) Impel all students to interact with technology, rather than just utilize technology.
- 2) Integrate the theory and practice of librarianship in ways which stimulate students to engage in critical thinking that culminates not with a mere analysis of current problems, but rather with a vision for the future that they will implement.

- 3) Utilize interdisciplinary approaches to problem-solving, innovation, and definition of the profession.
- 4) Prime students to anticipate change and incorporate it before change "happens" to them.
- 5) Show students, by example, how to be energetic and enthusiastic as they are challenged to master new concepts and skills on a daily basis.
- 6) Inspire students to think in ways that are flexible and quick enough to develop and assimilate, in a timely manner, new paradigms which define the profession and its practice.
- 7) Expose students to diverse cultural experiences which will enlighten and inform their professional decision-making.
- 8) Position "the library" and "information" within defining technological, international, social, economic, political, and cultural contexts.
- 9) Infuse students with clearly defined professional values and ethics which will help them to prioritize their professional behavior in ways that hold them accountable for their actions and in ways which reflect leadership and confidence.
- 10) Empower students with an understanding of the basic principles of librarianship which is clear enough to facilitate critical analysis of present practices based on predictions about the future.

The world of librarianship has changed; the education of librarians must also change. In order to survive, librarians can no longer merely turn information into knowledge. The librarians of today must be able to recognize the difference between information and wisdom, and they must be able to evaluate the wisdom of information. This is the challenge for library school educators of the twenty-first century.

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