
Educating and Training Library Practitioners: A Comparative History with Trends and Recommendations

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ABSTRACT

THE LIBRARY PROFESSION AS PRACTICED IN THE UNITED STATES has evolved into two primary divisions of employees: librarians and library technicians. A historical survey of the education of both groups reveals a number of persistent themes and some currently urgent issues.

The schooling of library practitioners is heavily influenced by two environments—i.e., academia and the profession itself. The academic setting for each group is different as are the roles of each within the profession. With current changes in economics and technologies, within both academia and the library profession, it is reasonable to expect that the differences between education for library technicians and education for librarians will continue to evolve.

The “support staff movement” offers an opportunity for inclusive leadership to create a setting that is responsive to the career and developmental needs of all library staff as well as to create a positive vision of the future of libraries. Distance education, enlightened personnel policies, recruitment from within, and the updating of policy statements on library education and library personnel are recommended areas of attention.

INTRODUCTION

In this article, comparisons are made between formal education for librarians and for library technicians. The scope of these comparisons is limited mainly to practices in the United States. Note that terms such as “librarian” and “professional” have been used to describe librarians. Like-

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wise, terms such as "library technician," "library clerk," "library assistant," "support personnel," and "library paraprofessional" have been used to describe library technicians. Note too that one author followed the evolution of library technician education, while the other did the same for the evolution of librarian training. They intentionally did not attempt to parallel one another's style or emphasis. The result is an occasional disjointedness, which the authors nonetheless believe to be of value.

A BRIEF HISTORY OF EDUCATION FOR LIBRARIANSHIP

The purpose of this section is to provide a brief overview of the history of education for librarianship. At the same time, several issues concerning the significance of such education are introduced. This discussion will provide a basis for comparison with both the development and the current nature of education for library technicians. A detailed chronology is provided in Appendix A.

Carroll (1975) suggests five periods in the development of library education: (1) before Dewey, (2) from Dewey to Williamson, (3) from approximately 1919 to 1939, (4) from approximately 1940 to 1960, and (5) from 1960 to the present. Reed (1975) starts with the same two first divisions but then divides by a series of more closely timed events. Richardson and Robbins (1993) simply divided their chronology into decades, starting with the 1870s. Bramley (1969) used a narrative style without major divisions as have a number of other authors. Robbins (1993) suggests three periods: (1) the Albany period from 1889 to 1926, (2) the sixth-year master's period from 1927 to 1960, and (3) the fifth-year master's period from 1960 to present. Carroll's divisions will be used in this discussion.

Before Dewey

The pre-Dewey period is the time prior to 1887 when the first formal library school was established by Melvil Dewey at Columbia University. Nasri (1972) explains that, as early as 1829, the need for a library training school was recognized by Martin Schrettinger in Munich. The need, however, was not great, since libraries were rare and composed of small collections, and scholars and clergy had adequately filled the role. As the nineteenth century progressed, libraries became more common, and their collections increased in size. Colleges and universities began to accumulate more formal collections, and governments and private institutions began to support other types of libraries. Eventually, people were needed to manage them. These needs went beyond having individuals who were simply well read to those with skills in organizing the materials and in administrative tasks. Nasri (1972) cites Mary Wright Plummer's 1901 outline of the history of library training, in which she said that prospective librarians typically had three options for their training: (1) trial and error

on the job; (2) apprentice-style training by working in an established library and imitating what was observed; and (3) taking some form of classes, personal instruction, or formal training often in a university library (p. 417). The most commonly exercised of these options was some form of apprenticeship, although in-service classes were also available for library employees in some locations (Reed, 1971, p. 19). Overall, library education lacks both uniformity and consistency, as well as opportunities for a general formal education.

From Dewey to Williamson

This period stretches from 1887 when Dewey established the School of Library Economy (Library Economy being the common phrase of the time describing the body of knowledge of the library trade) at Columbia University to the Williamson (1971) reports in the early 1920s. The establishment of the Columbia school was the pivotal change during this period. Bramley (1969) describes how opening the school became an issue which was to become important in the development of library schools (p. 77). It was an early step toward professionalism. At first, Dewey called for a systematic apprenticeship program on the trades model; when this was not forthcoming, he simply started the school. Dewey vacillated between the trade and profession concepts in his writings until, in 1883, at the Buffalo, New York, American Library Association (ALA) conference, he expressed his views that librarianship had in fact become a profession. Some effort was put forth in 1893 to separate the professional education programs at the (New York) State Library School and at Illinois from the various institutes. At the Conference of Librarians at Lakewood-on-Chautauqua, it was established that: (1) the schools of librarianship should be attached to universities; (2) college graduation should be the educational requirement for admission to the school; and (3) an examining board with clearly defined authority should be set up (Bramley, 1969, p. 82). This was the beginning of the debate over another key issue: Should a librarian's credentials be established by certification of the individual or by accreditation of the program from which the individual graduated?

Dewey also touched on another key issue during this era. His initial recommendation for training was a three-month course of instruction, followed by two years of practical experience, then a return for another three months of instruction. The proper balance of formal instruction and practical experience has been a debated issue in library education ever since.

Another significant influence from the Dewey school (which moved in 1889 from Columbia to the New York State Library in Albany) concerned the education of early Dewey students and their subsequent activities. Mary Plummer, at the Pratt Institute, and Katherine Sharp, at Armour, led institutes oriented toward library technical training (Nasri, 1972, p. 419).

Despite the initial association with Columbia University, the emphasis of the various library institutes was of a technical sort throughout this era.

The close association between library professional organizations and library education, another issue critical to U.S. library schools, began developing during this period. Dewey managed to solicit a statement of approval from the Buffalo conference of the American Library Association, which he forwarded to the board at Columbia as they considered the establishment of the school (Bramley, 1969, p. 78). This connection continued with the formation in 1915 of the Association of American Library Schools, which set some early standards for library schools (Carroll, 1975, p. 8).

This period ended with the issuance of the Williamson reports in 1921 and 1923 (Williamson, 1971). These reports by Charles C. Williamson summarized the results of a Carnegie-commissioned survey of library schools done in 1920 and 1921. The report was of landmark significance for library education, as it established a number of principles which are still in practice today. The report described the failures of the schools in place to produce minimally uniform satisfactory levels of library education. Several important reforms resulted from the reports: (1) the profession was more clearly separated into clerical and professional work, with separate education recommended for each; (2) graduate library schools with advanced studies were established with the idea that professional leadership would come from the schools; (3) bachelor's degrees, preferably in broad liberal arts, were recommended as admission requirements; (4) professional library schools were to be affiliated with degree-granting institutions; (5) the Board of Education for Librarianship was established by the American Library Association; and (6) the American Library Association accepted responsibility for accrediting library schools via the board (Carroll, 1975, pp. 10-11). In 1925, the Board of Education for Librarianship set up minimum standards for accreditation.

1919 to 1939

This period saw the entrenchment of the association of professional education with graduate schools affiliated with universities. Theoretically based education took sway over Dewey-style vocationally based education. Accreditation began its emergence as the quality standard for professional education.

One of two very significant events of this era was the founding of the Graduate Library School at the University of Chicago in 1926. This event finally pushed the debate of vocational versus professional emphasis in the direction of professional theory, what Reed (1971) calls a truly university graduate school effort. Scholars from a variety of disciplines were involved from inception, all thoroughly grounded in academia (p. 24). As a result, the school brought academic study and scientific research to the profession, as well as colloquia and scholarly publication. The school

also offered the first doctoral program in library science, a crucial step in addressing the need for university trained faculty and professionally trained researchers in library science.

Carroll (1975) explains that the environment at Chicago was intended from the start to be a professional school on the level of elite medical and legal graduate programs. They were not attempting to imitate programs already in place, nor was it expected at the time that a large number of schools similar to Chicago would be needed, although four other programs went to a sixth-year master's. (It was not until seventeen years later that Chicago offered its first B.L.S.) This program set the stage for the wide acceptance of the Master's in Library Science (M.L.S.) and its variants to be considered, in effect, the license for the practicing library professional.

The other significant event of this era was the 1993 revision of the minimum requirements for accreditation, which firmly established the role of the profession. The American Library Association's Board of Education for Libraries established three types of library schools. Type one was composed of university programs, which would lead to master's degrees or higher, and where the master's degree would include two years beyond a four-year bachelor's degree. Type two was a program leading to a bachelor of library science degree, normally a one-year program for students who had already completed a liberal arts bachelor degree. Type three was for undergraduate programs as part of an undergraduate curriculum which also led to a bachelor's degree (Bramley, 1969, pp. 84-85). The strong role of both academia and the profession in the schooling of librarians was now established.

1940 to 1960

This was a period of significant surveys and conferences which influenced the evolution of librarian training. It also saw a significant revision of the Standards for Accreditation.

Carroll (1975) describes the nature and results of the conferencing period. A relatively small group of active participants visited and revisited key proposals and ideas. Carroll summarized ten major concepts or events which arose from these conferences:

1. Graduate library schools should provide centers of research and library science instructors.
2. A need existed for broad undergraduate preparation for library school candidates.
3. A candidate should have four years of undergraduate education.
4. Consideration was given to fifth-year master's degree programs.
5. Consideration was given to establishing additional doctoral and fifth-year programs.

6. Danton and the West Coast School's efforts were seen to reinforce scholarship.
7. It was seen as time to evaluate the state of undergraduate programs.
8. A core curriculum was seen as essential for librarian education.
9. Specialization training was disavowed as a responsibility of library schools, though they might include it.
10. Acknowledgment was given to the need for library education publication, the role of the board in education, and the need for attention from the entire profession (pp. 14-15).

During the 1940s, a number of significant surveys and reports came out which, taken together, influenced the direction of librarian schooling (see Nasri, 1972, pp. 424-25; Carroll, 1975, pp. 16-17). Among the major ones are the following: (1) Metcalf, Osborn, and Russell (1943) criticized the preparation of library instructors and the elementary nature of the curriculum. They recommended stronger teaching of principles and philosophy and improved teaching techniques. (2) Wheeler (p. 42) summarized several criticisms of the time. He suggested that it would be better to have a few good strong schools than a lot of weak ones. He believed that many fundamentally weak schools were trying to expand. He also perceived the continuing struggle between the academic environment and the professional environment, acknowledging that striving for true graduate level scholarship would create conflict with employers wanting more attention to skill-level details. He recommended that library administration be given more emphasis. (3) Danton (1949) criticized overemphasis on details and an approach of being too general. He made the significant recommendation that the education for different types of library employees should be distinctly and clearly different. In particular, he recommended separate educational programs for library technicians, mid-level employees, and administrators. (4) Leigh (1950) reported on the results of his survey but did not push any particular agenda, as did some of the preceding reports. He reported that a new environment was emerging, that the post-bachelor master's degree was becoming the basic pre-professional training, and that the basic core of courses, minus some of the simpler elements, was becoming stable. He also addressed a number of economic influences, noting that many of the weaker library schools were too small and financially poor to withstand the imposition of better standards (p. 16).

Due in part to the influence of these various conferences and reports, a new set of standards for accreditation was adopted in 1951, with one significant change from the 1933 minimum requirements: the three types of library schools were dropped; only basic pre-professional education was addressed in accreditation. The emphasis now was placed on a general core that all employees would need, regardless of their specialties. This

one program was expected to be a (typically five-year) master's program with a four-year degree as an entrance requirement. Thus accreditation came to center on one basic program; variations would be dealt with in different arenas.

In 1956, the board was replaced by the Committee on Accreditation, an appointed committee charged with accrediting first-professional-degree programs and maintaining standards (Sullivan, 1986).

1960 to Present

This era has seen the first major integration of a whole new discipline into the field of library science, that of information science. Within this period, accreditation standards were revised twice, in 1972 and 1992. Additionally, this period has seen significant fluctuations in the number of accredited programs, the number of faculty, and the size of student enrollments.

As Robbins (1993) points out, one has only to look at the current names of library degrees to realize that changes in professional education, while not yet assimilated uniformly, are nonetheless underway (p. 12). Examples cited include Master's in Resource Information Management (M.I.R.M.), Information Science (M.I.S.), Management Information Systems (M.M.I.S.), and Library and Information Science Studies (M.L.I.S.) (p. 12). In fact, Miller (1996) points out that the current roster of forty-seven ALA-accredited programs lists no schools of just library science (p. 46). Either "information" or "information management" is dominant in their titles. From this evidence alone, it is clear that information science has become a significant theme in library education. Auld (1990) draws the reasonable conclusion that, since librarianship is the practical application of information storage, organization, and retrieval, library schools should now embrace the principles of information science (p. 57). Despite being a sensible bonding, it has also, to some degree, been a forced union. Information science schools were becoming direct competition for the library schools. For another, it was true that, whether education for librarians included information science or not, the daily practicing world of librarians would incorporate it anyway. Marcum (1997), in listing examples of programs changing their curriculum to adapt to the times, uses the University of Michigan as an example (p. 35). Paralleling its name change from "School of Information and Library Studies" to "School of Information," the school has enriched its library curriculum with aspects of information science and recruited appropriate faculty from other fields in order to do so. Robbins (1993), however, points out another wrinkle in the information science emphasis: not all library students will go into library work; some will be heading into the nonlibrary side of the information profession (p. 15).

A new *Standards* came out in this era in 1972. Changes included the requirement that a program have clear and stated goals and objectives, which would be used to evaluate the program. More emphasis was to be placed on basic research, more contact with students was to be provided, and accountability provisions were appended (Bidlack, 1975, pp. 41-45). The latest *Standards* came out in 1992, with the significant new feature that the field was now called "library and information studies" thus acknowledging the importance of information science to library education. It also emphasized functions rather than work settings and indicators of results over the itemization of equipment, faculty, etc. (Robbins, 1992).

Fluctuations have occurred throughout this era in the number of schools, faculty, and students. Carroll (1975) refers to an unprecedented increase in accredited programs (p. 21); almost twenty years later, Robbins (1993, p. 13), Dalrymple (1997, pp. 31-33), and Daniel (1993, p. 56) paint a very different picture. From the early 1980s to the early 1990s, a significant drop occurred in the number of accredited programs and total faculty, with a significant increase in student enrollment. These changes have put pressure on faculty, especially given the increase in research and publication.

Such is a brief history of what has become master's level education at the graduate level for that first professional degree. We turn now to a historical look at the training for what is now considered the education or training needed for what has become the role of support staff.

THE HISTORY OF EDUCATION FOR LIBRARY SUPPORT STAFF

Even though differentiated duties in library work may be traced back to the Alexandrian library (from Pharaoh's librarian, through assistants, to slaves) and the role of the librarian as an educator to John Dury's *The Reformed Librarian-keeper* of 1650, formal library education history really starts with Dewey's establishment of the School of Library Economy in 1887 (Russell, 1985, p. 293). Dewey asserted in 1876 that "the time has at last come when a librarian may, without assumption, speak of his occupation as a profession" (quoted by Russell, 1985, p. 294). His curriculum and those that followed soon after, however, did not differentiate professional from supportive duties by levels of staff. The School of Library Economy, in fact, described itself as "a short and purely technical course, coming after the general education has been completed" (cited in Metcalf et al., 1943, p. 11). Metcalf et al. describe Dewey's whole approach as an "enlightened apprenticeship" (p. 17).

"Clerical work was seen to be inescapable in any library, and instruction in this was therefore provided..." (Reece, 1924, p. 3). Instruction included "hand-writing, typewriting, and the lettering of books..." (p. 4). Reece goes on to suggest that it was the needs of the free public library that shaped the early curricula and that "the library schools were orga-

nized and grew up in a period when the development of technique was regarded, and rightly so, as the outstanding task of the profession" (p. 4). By 1924, however, Reece could write, "it seems safe to assume that before many years libraries may be able to abandon the expensive experimentation in technique which has drawn heavily upon their administrative resources in the past; and that, the systems preferable for the various processes having been determined and codified, the libraries will need only to concern themselves with applications...[and] variations" (p. 5).

Thus Reece, writing only a year after the monumentally influential Williamson report, can advocate a "library education scheme" to include training for clerical grades (routine processes) in training classes, training for lower grades (methodology) in college classes, and graduate study (knowledge of subjects and sources) offered only in universities (p. 7).

The graduate education recommended by both Williamson and Reece was implemented but, except for isolated attempts, the rest of the scheme was not. Instead, there emerged an oscillating debate, several decades long, about the proper nature of graduate education: should it be practical or theoretical, should it be training statesmen or scholars, humanistic bookmen or information scientists? Given such interminable debate, it is not surprising that the sporadic recommendations and experiments of the next several decades did not have a general effect on education related to library employment.

A course in library assistance was offered by Los Angeles City College in 1937. The U. S. Department of Agriculture Graduate School offered the first library technician program in 1948. In 1949, the Special Libraries Association, in conjunction with the Ballard School of the New York City YWCA, offered a clerical practice course for special libraries. In the same year, Reece (1949) suggests that "the trend of a generation ago to put the training of [library workers] on the graduate level, without discrimination as to the nature of its parts, was a misdirection of effort" (p. 72). Reece again recommends junior college level training for appropriate tasks, and trusts employing libraries to maintain appropriate standards "to prevent bad coin from driving out good" (p. 75).

Also writing in 1949, Clarence Faust, in a moving defense of the need for a liberal education in librarianship, writes: "Looking back over the development of librarianship in this country, one can make out a sequence of shifts running from the conception of the librarian as bookman, through the librarian as technician, to the librarian as administrator" (p. 96).

Erret W. McDiarmid (1949), too, notes that libraries need at least as many support staff as they need librarians. He argues that "the almost complete neglect of the problems involved in training workers below the professional level has resulted in conditions which are very dangerous to the future of librarianship" (p. 232).

McDiarmid suggests that a task requiring some knowledge of library work is not on that basis alone something we should continue to view as the sole province of the professional librarian. He distinguishes nonprofessional duties on the basis of judgment. Nonprofessional duties are those which are "performed according to adopted practice and methods...or under the direction of someone who exercises judgment in deciding how they should be done" (p. 235). His recommendations would deeply involve nonprofessional staff in acquisitions, cataloging, and reference, with training to be provided in a two-year junior college program.

McDiarmid's curriculum for library technicians includes both library techniques and general education. Alice Lohrer, in a discussion of McDiarmid's proposal, urges "a sharp distinction...between a library clerical worker and a subprofessional library assistant," leading to three distinct levels of library employment (McDiarmid, 1949, p. 49).

These distinctions did not, however, prevent an ALA-recognized library technician program in Middleton, New York, from failing due to professional disagreements in 1958. The experience is said to have left a persistent negative attitude in ALA. Still, the very next year, California provided state-level endorsement of two-year training programs.

In 1964 and 1965, the Economic Opportunity Act and the "new careers" movement stimulated undergraduate vocational education; at the same time, ALA took a stand discouraging two-year programs as producing "cheap librarians." Despite this objection from ALA, two-year training programs continued to form and gain recognition. The Canadian Library Association affirmed the need for library technicians in 1966. ALA Administration and Education divisions did likewise in 1967, the same year the Council on Library Technology was formed. By 1968, the Deiningier Committee of ALA had recognized both library clerks and library assistants. In 1969, the Vocational Education Act was used to fund summer institutes for training library technician teachers, and ALA (1979) published *Criteria for Programs to Prepare Library Technical Assistants: Statement of Policy*.

In 1970, the "Asheim Statement" became ALA policy (American Library Association, 1970). ALA had now recognized potential career ladders for three levels of library employees. (The current version of the statement, last revised in 1976, is now entitled Library Education and Personnel Utilization [LEPU].) In 1971, ALA adopted its "Criteria for Programs to Prepare Library/Media Technical Assistants," the 1979 version of which is currently under review (American Library Association, 1979).

Yet, in 1980, the *Conant Report* still concluded that "the library profession needs to develop a coherent basis for its claim to professionalism. There is no better way to achieve that coherence than to separate professional from nonprofessional training in its system of education and to improve the quality and content of its master's programs" (p. 193). Conant

also cited "a mutually damaging gap [that] exists between the library educators and the working profession" (p. 195).

By 1982, COLT was involved in revising the S-1411 series for the federal *Occupational Outlook Handbook*. The later 1980s (1987 and 1988) saw the founding of statewide library assistant associations in New Jersey and New York. Another was formed in 1989 in North Carolina. Also in 1989, *Library Mosaics* began publication as a national medium for and about support staff, and John Berry published an oft-quoted editorial on "The Other Librarians" in *Library Journal*.

Oberg, Mentges, McDermott, and Harusadangkul's monumental study, "The Role, Status, and Working Conditions of Paraprofessionals: A National Survey of Academic Libraries," appeared in 1992. The study was preceded and succeeded by relevant editorial summaries and interpretations. The same year saw the founding of LIBSUP-L, an Internet discussion list for support staff; and the Washington Association of Library Employees, an interest group of the state library association, held a statewide conference for library support staff.

In 1993, a paraprofessional was elected president of the Colorado Library Association; another was elected secretary of the Oregon Library Association.

The year 1995 saw the founding of the Library Support Staff Resource Center (1995) on the World Wide Web and the first of the national "Soaring to Excellence" teleconferences for support staff. The second "Soaring to Excellence" teleconference was held the following year.

It is our feeling that the Oberg (1992) study, in part by the influence of its conclusions but mostly by its exposure of actual practice in libraries, has deflated a good part of a decades-old debate on the role of support staff. Specifically, the question of whether support staff will be asked or allowed to perform some particular library function or task is always answered "yes." It also appears that support staff self-identity has reached a critical mass in terms of ability to organize and to draw attention from those who service the needs of library workers. Those parts of the debate which have not been clarified include appropriate recognition for the skills and efforts of the paraprofessionals, and any definition of the role of M.L.S.-level employees. It is to these and related themes that we turn next.

SOME CURRENT THEMES AND FORCES IN EDUCATION FOR LIBRARIANS

Before examining those themes, however, let us mention some of the current themes and forces at play in the education of librarians and contrast these with the formal educational context for support staff. Graduate or M.L.S.-level education can be shown to be at a particular point with regard to curriculum, economics, and technology, and in the balancing between professional and university environments.

Curriculum

Curriculum has gone through a number of relatively long periods with little change, alternating with periods of significant change. Dewey's curriculum was fundamentally oriented around the skills and mechanics of library operations. In the wake of the Williamson reports and the University of Chicago School, curriculum evolved to a theoretical and functional approach. A core of subjects considered essential to all librarians lay at the heart of the curriculum. Grotzinger (1986) described an early core list as including: (1) fashioning a library collection, (2) organizing and caring for a library collection, (3) using a library collection, and (4) directing a library enterprise (p. 456). A later list from the Committee on Accreditation (American Library Association, 1977) shows:

- (1) An understanding of the role of the library as an educational and information agency.
- (2) An understanding of the theories of collecting, building, and organizing library materials for use.
- (3) A knowledge of information sources and an ability to assist the user of library materials in locating and interpreting desired items.
- (4) Knowledge of the principles of administration and organization to provide information services. (p. 456)

This type of core statement stayed in effect until information science became an established subject in library science. Information science was added as a core subject in the 1992 *Standards*. Elective subjects filled in the remainder of the student's training.

The diversity of fields now considered desirable as core subjects has created some difficulty with the traditional five-year programs. One year of library school is unlikely to be enough. Over time, various combinations of five-year programs, five-year programs with a sixth specialty year, and straight six-year programs have been used. The five-year programs have been the most popular for the longest period of time; however, some schools are currently using six-year programs, and the concept is being discussed again to help with getting the necessary core material to students (Rapple, 1996). Undergraduate preparation degrees such as information science are also being considered as a prerequisite for admission. Buttlar and DuMont (1996) suggest a need for management skills, interpersonal skills, communication skills, and technology/automation skills in addition to the more traditional skills (pp. 46-47). These needs are arising from changes in the role of librarians due to the combined effects of economics and technology.

Economics and Technology

In recent years, the combination of these two forces has created significant changes in library education. Universities are dealing with tighter budgets. Programs that are at least partly self-supporting are much more likely to survive. Research money has become a major source of income

for some departments. Traditionally, library schools have participated heavily in such activities, in part because library research was not seen to have much in the way of broad application. Now that technology has made crucial the handling of large amounts of information, there will be opportunities for the expertise embedded within library and information science to be of broad value. Library schools are also creating alliances with other departments that do have more income-producing possibilities. Daniel (1993) suggests that the higher income alumni coming out of information-based programs also will help library schools to compete more successfully in academic environments (pp. 57-58); while Reeling (1993) contends that library schools will likely need to bring in increasing sums of money to survive (p. 8).

The combination of economics and technology has also altered the professional environment. Libraries themselves are facing tight budgets. Technology is making it possible for library technicians to do many of the jobs which at one time were traditionally reserved for librarians. Economic pressures have encouraged libraries to take advantage of this. Librarians are being moved more into helping libraries adapt to change and providing management, planning, preparation, and the like.

BALANCE BETWEEN PROFESSIONAL AND UNIVERSITY ENVIRONMENTS

Ever since library education moved into the graduate school arena, it has been obvious that there have been tradeoffs for both sides. Both sides benefit, but it is also true that some of the needs of university departments and some of the needs of the profession are at cross purposes. As part of a university community, library schools need to contribute to basic research and to teach theory, function, and structure. As part of the professional community, library schools need to teach practical skills and contribute to continuing education. Library school resources typically do not stretch that far, so compromises must be made. The impetus from the Williamson report was clear in its implication that professional and vocational training should be separated. It is unlikely, however, that Williamson expected the divisions in the actual workplace to get as blurred as they have become. Similarly, he likely had no inkling of how many people would be functioning in the field with professional degrees or how many of these people would have strong needs for vocational training. Lester (1990) emphasizes the existence and the effects of these identity uncertainties for library schools (p. 580). For the students who are prospective library practitioners, this tension between academia and the profession at times produces some disappointments when they start to work and find they often need considerable on-the-job experience to become comfortable with their work. Testimonials to that effect are common in the literature. Perhaps a little coaching about this dichotomy while students are still in school would help alleviate surprises.

How do these same factors—curriculum, economics, and academic setting, as well as expected returns—affect the educational environment for, most formally at least, library technician programs? Let us now look at that question.

SOME DIFFERENCES BETWEEN EDUCATION FOR LIBRARIANS AND THAT FOR LIBRARY TECHNICIANS

Curriculum

Auld (1990) points out that, if transcripts for a Library Technician Associate and a Master's in Library Science were placed side by side without identification, it could be difficult to identify which was which (p. 57). This is still somewhat true. The authors do feel, however, that this kind of comparison is misleading, and that there are curriculum differences having to do with the slant taken with the subjects. For instance, for indexing and abstracting, the M.L.S. program is likely to lean in the direction of teaching both how to use and how to create such bibliographic control devices. For the LTA program, it is likely that the emphasis will be more on how to use such devices. These kinds of differences permeate the two types of programs. The M.L.S. program, while dealing with similar subjects, is more likely to emphasize the management, development, creation, and research sides of the curriculum. The LTA program is more likely to deal with the pragmatic. Auld (1990) wisely suggests that students should be taught about these differences in approach (p. 57). This would increase the likelihood that in cataloging, for example, the library technician and the librarian would have a little more sensitivity to what each other's strengths and roles will be and what their working relationship is likely to be when they work on cataloging together. It should be noted that these workplace roles and their corresponding education are evolving. It is therefore reasonable to expect that the differences in education will also evolve.

Academic Environment

Library technician programs typically reside in the community college, technical/trade school environment. Librarian programs reside in the university graduate school setting. This fact carries implications for both students and faculty. Librarian candidates are likely to become involved in research as part of their education. They are also more likely to be involved in the scholarly side of the profession. Library technician candidates are more likely to get involved in the application side of the profession. Faculty obligations are also different. For university faculty, basic research and publication are appropriate parts of their role. For technician school faculty, primary responsibilities are often teaching, recruiting, and placement.

Cost/Benefits

The two programs differ greatly in cost and financial rewards. The M.L.S. program requires the financial and lifestyle costs of a bachelor's followed by a master's program. The LTA programs require only the costs of an associate degree or possibly a certificate program. On the other side of graduation, fully employed librarians have the opportunity for greater choice and greater financial reward. Currently, in some parts of the country, M.L.S.s run a higher risk of not finding full-time employment. LTAs face fewer choices and lower pay. In much of the country, however, they have greater chances of employment.

In our review of the literature, several themes emerge as consistent topics in all of library education, as do some current issues that need immediate attention by the field. Let us look first at some of these pervasive themes.

PERSISTENT THEMES

A review of the literature on library education reveals a number of current issues and several recurring or persistent themes. Eight themes that we wish to examine briefly are: (1) the need or place for a liberal education in library work, (2) the quality of students drawn to library work, (3) what it means to be "professional" in the library field, (4) the perception that something is wrong with library school, (5) the appropriate role of accreditation in library education, (6) the ongoing perception of budget constraints, (7) the need for distinctions between training and education, and (8) discussions of the role of information science in library education.

Liberal Education

Reece (1936) writes that "library work in any country previous to the nineteenth century would seem to have necessitated, as a rule, few qualifications that an educated man would not possess. . ." (p. 5). Libraries were small collections put together by and for those who wanted to share the intellectual benefits of access to those collections. Any needs for techniques and theories of librarianship were so miniscule as to be beneath notice. Reece continues: "What had to come before library work could be distinguished from other activities concerned with books and, consequently before it could be defined, was the realization that it is both intermediary and active....The librarian need not discover knowledge or create books, and his major reason for existence is that his efforts make the content of books more available and operative than otherwise it would be" (p. 5).

From the outset, then, we see the librarian working from a knowledge of content. Reece notes that this did not "narrow his function. . . . No limits are easily set upon his endeavors when he is called upon, after

assembling books, to preserve them, to arrange them, to offer them to readers, and even to interpret them—all with reference to an ascertained want” (p. 5). Implicit here is the broad range of general knowledge out of which the librarian practices.

The sentiment holds through our major milestones to today. Lester Asheim restates it explicitly in 1971 in a discussion of the implications of *Library Education and Manpower* (ALA, 1970):

In other words, although the principles of librarianship can be stated in terms that perhaps could be mastered at the level below that of the graduate school, they have full professional import only when they are related to a broad, background knowledge of other subject matter. The librarian does not perform any of his skills in a vacuum....Without the subject content, the application of techniques is simply a matter of skills and training; technical, but not professional. (p. 8)

Discussing the master's degree as the first professional degree, Jane Robbins (1990), a library school professor, states:

It is often maintained that professional education is provided at the master's degree level because professional education requires an intellectual maturity that is gotten most effectively only through the attainment of a bachelor's degree. In librarianship it is further maintained that a broad-based liberal arts degree is the preferred undergraduate education as librarianship is often practiced in institutions (libraries) that have broad-based educational missions. (p. 42)

This pervasive concern for a liberal education is also expressed as concern about the library student.

Student Quality

In a discussion of the most frequent criticisms of library schools, Munn (1936) cites the complaint that “the schools are not producing leaders and statesmen” (p. 22). He responds that “it is nonsense to expect the one-year library school to train leaders and statesmen” and asserts that “the greatest hope of securing leadership lies...in attracting the right kind of person to the profession” (pp. 22-23). Abraham Kaplan (1965) writes that “every profession, if it is to be meaningful, at least to its practitioners, must always be something of a calling, something to which we are impelled from within, that is—literally a vocation and not merely an occupation” (p. 12). In 1983, Ralph Blasingame of Rutgers suggests that “renewed intellectual effort must take place so as to create a program which will attract a more aggressive body of students and to prepare them for work which has more vitality than many types of work for which we have traditionally trained people” (p. 1986).

Will Manley (1986) has asserted that “the quality of graduates seems to be declining” (p. 34). He sees the profession's traditional pool of women being drawn to other fields by new opportunities, and “the interests of

library school students are narrowing. They're more concerned with computers than books; more interested in bibliotechnology than the humanities" (p. 34). This trend, he believes, is exacerbated by the inclusion of "information science" in the names and curricula of library schools.

Whether it is "leaders and statesmen," humanists, or information scientists that are needed in the field, the profession continues to express its concern to itself about its professionalism and its image.

The Library "Professional"

Abraham Kaplan (1965), at the Twenty-ninth Annual Conference of the Graduate School in Chicago, states: "[L]ibrarianship is in a really critical condition....the profession is now unsure of what its functions are and also unsure of just how to go about performing whatever functions are assigned to it or that it adopts" (p. 7). Such uncertainty seems endemic in the professional literature, if not through the century, at least since the Williamson report of 1923. Even as late as 1994, Allen Veaner suggests that "there often remains puzzlement over what librarians do and a troubling perception that, whatever it is, almost anyone can do it" (p. 390). (As we will see later, when we examine the roles of support staff, the roster of who can do what librarians do is expanding greatly in actual practice.)

There is some consensus within the "professional" ranks that a list of objective competencies, or task analysis, cannot provide a meaningful sense of what is professional. "Basic competencies at best measure what librarians presumably do, and not what they have to know to be able to understand the context in which they do it" (White, 1988, p. 56). Similarly, "[t]he outcome of applying task analysis to professional duties and responsibilities usually results in generalities or, worse, trivia" (Robbins, 1990, p. 42).

Librarians themselves question the value of graduate library schools in producing librarians that are distinctively professional. Manley (1985) for one refers to "the aeons' long debate concerning a) what a 'professional' is, b) whether librarians qualify as professionals, [and] c) whether non-possession of an MLS is what makes other people who work in libraries non-professionals" (p. 677). One theme that arises naturally from this discussion is the question of what is wrong with the library schools that they do not produce graduates with a clearly distinguishable look and feel of professionalism.

Is Something Wrong with Library Schools?

"Playing 'What's Wrong with Our Library Schools' is a popular game among librarians. Somehow, 'What's Right...' has never caught on—too bad, because there are some notable strengths" (Auld, 1990, p. 55). On the other hand, Rayward (1983) has suggested that there is an insufficient dichotomy between library schools and those in the field. "[O]n the whole librarians and library educators are . . . a single, relatively undiffer-

entiated group that share a professional allegiance so strong that it can interfere in some cases with the socialization of educators into the academy" (p. 1316). He goes on to suggest that: "When the potential conflicts between practitioners and educators become sharp, vigorously expressed, and represent genuine differences between academic responsibilities and professional necessities, our field will move much closer to true graduate professional education" (p. 1317).

While Rayward is looking toward some intellectual vigor and the energy implicit in a dichotomy between research and practice, some of the distancing has dismal implications. For example, John Berry (1994), in an editorial on helping a good prospective student pick a library school, writes: "Many of the librarians around LJ agree that the greatest danger in an LIS program is that it may kill the enthusiasm a new recruit brings to our field" (p. 6). Similarly, three Ph.D. holders contemplating library school report that the comments of their friends and relatives who had gone to library school were "if not forcefully negative, [at least] lukewarm to the experience" (Cooper et al., 1987, p. 41).

We may note here that the presence of lukewarm (and unwealthy) alumni and a professoriate that is unsocialized into academe are possible factors in the survival or nonsurvival of library schools. Rothstein (1985) speculates, in fact, that given their brevity, "library school programs do not have enough time to socialize their students to the profession" (p. 45).

Rothstein's (1985) article, "Why People Really Hate Library Schools," accompanied by his anecdotal "An Anthology of Abuse: 97 Years of Criticism of Library Schools," posits five main theories about the why. Because alums age and the profession moves on, finding a definitive explanation is difficult. Alumni negativity does seem to follow a predictable pattern as the alums age. Rothstein quotes Cyril Houle to the effect that "the voice of the aggrieved alumnus is always loud in the land and, no matter what the profession, the burden of complaint is the same" (p. 45). For the first five years, alumni think "they should have been taught more practical techniques" (p. 45). Then there is a five-year period of wishing they had had more basic theory, five years of wishing for more administrative content, then another five of wishing for a broader social and historical context for the field, and finally five years of wishing it had been a "broader orientation to all knowledge, scientific and humane" (p. 45).

Even Houle's sequence seems inadequate to explain the ninety-seven years of consistent criticism documented in Rothstein's "Anthology of Abuse." Rothstein concludes that the unique factor in the criticism arises from the kind of personality that chooses librarianship and which does so relatively late in life. Rothstein cites studies showing that, compared with other populations, librarians are, among other things, shy, suspicious, apprehensive, undisciplined, tense, and conservative. Librarians are shown to be loners and outsiders given to self-doubt because they are readers,

and they are readers because they do not fit into any group. A further study cited by Rothstein shows librarians to be "self-reflective, inner-directed individuals whose motivations and rewards are intrinsic rather than extrinsic... motivated more by self-respect than by the respect and admiration of others" (p. 48).

While Rothstein cited studies that found library school teachers more bold than working librarians, the Paris (1990) study of "Why Library Schools Fail" identified behaviors that would be consistent with the personality characteristics of Rothstein's librarians. Paris found that library school closings are accompanied by a sense that they are too small and too politically isolated from the rest of academe to seem important. So isolated are they, in fact, that their attempts to move into information science and management were seen as encroachments on the territory of other departments.

The Appropriate Role of Accreditation in Library Education

Accreditation is a process whereby an outside agency attests to the quality of an educational program and must not be confused with the activities or criteria by which individuals become certified, credentialed, or licensed, even though graduation from an accredited institution may often be a step, or even the step, toward a credential. Universities, colleges, and community colleges are accredited as a whole by their appropriate regional associations. Professional programs, however, may be accredited by groups involved with the profession. Accreditation is done at the professional school level in librarianship by an ALA committee. There is no professional certification mechanism for doctoral, bachelor, or associate education programs. Further, the schools affected might very well resist such efforts as incursions.

There are those who would like to see the accreditation process expanded to a full continuum of library education, those who would like to see accreditation used to adjust the number of schools in terms of supply and demand, and those who would have the accreditation process affect the geographic distribution of library schools. Two articles that summarize the nature of, and issues surrounding, the accreditation of library education programs are Eshelman's (1983) "The Erosion of Library Education" and Daniel's (1985) "Accreditation." A good review of the M.L.S. in the context of professions whose practice is limited to those with appropriate education is Robbins's "Yes, Virginia, You Can Require an Accredited Master's Degree for That Job" (1990). "Standards for Accreditation of Master's Programs in Library and Information Studies Adopted by the Council of the American Library Association January 28, 1992; Effective January 1, 1993" and related documents are available on ALA's Web site at www.ala.org/alaorg/oa/standard.html

Budget Constraints

Many library employees have fairly long careers during which each year appears to be a budget crisis requiring the library and its staff to "do more with less" (Rabago, 1994, p. 13). Early educators and many of today's self-reflective service-oriented staff are moved to make sacrifices to support the so-called "village library." Library salaries are often cited as reasons why students cannot afford, or see as justified, a longer formal education. White (1989), however, suggests the obvious: as with pet food, society can afford whatever it wants to afford and, further, libraries that cannot afford a library staff, including a professional librarian, are not libraries but something else (p. 52).

There is a relevant body of literature dealing with the economic devaluation of "women's work." A sprightly and feminist review of this and related library employment issues is Terry Rodgers's (1997) *The Library Paraprofessional: Notes from the Underground*. Here, however, we suggest an underlying cause for less than exuberant financial support and rewards for library work. Namely, it is that the value of what libraries and library staff do is perceived as outside the gross materialism of the money economy. Space prevents a full consideration here, but we can allude to Lewis Hyde's (1983) *The Gift: Imagination and the Erotic Life of Property*. "Erotic" in Hyde's subtitle refers to a gift exchange as "an 'erotic' commerce," one that arises out of the attraction, involvement, and union that characterizes *eros*, as opposed to the differentiation and logic of the *logos*-centered activity of a market economy (p. xiv).

Hyde uses "gift" to refer to several situations, from the gift of talent (gifted artist), to the product of such talents, to transactions that take place outside the realm of money economics. We may find it repugnant, for example, to sell human organs for transplant. In Hyde's example, we are likely repulsed by the daughter who would trade a much needed kidney to her mother if the mother would buy her a fur coat (p. 69).

Following a similar logic, we may pay a baby-sitter minimum wage, finding it unreasonable as well as unappealing to think that the baby would be watched more vigilantly or with more tenderness if we were to double the wage of the baby's sitter. Such considerations touch on our expectations and values in the areas of love, intimacy, compassion, empathy, and decency. That these concerns often apply to fields such as teaching, nursing, and librarianship is not simply discrimination against women or "women's work" any more than reluctance to fund the arts is merely an attempt to prevent the dissemination of Mapplethorpe.

It follows that the failure or tacit refusal of librarians to leap onto some higher-paying information-management bandwagon may not be out of docility, weakness, or victimhood. It may also be that, while society may sometimes generously fund only the architectural monuments of libraries, it is not necessarily just stinginess or lack of appreciation that keeps it

from being more financially generous about the work that goes on in those libraries. A more complex set of values is at play here, something that deserves further analysis.

Distinctions Between Training and Education

There has been, since at least the Williamson report, a consistent resistance to practical training at the graduate level. Carnovsky (1942) discusses curricular reform in an attempt to:

apprehend librarianship as an intellectual discipline, to see it steadily and to see it whole. Preparation for it should be conceived in terms of concepts and functions, not in terms of time. The mastery of skills, techniques, and routines should not be permitted to eclipse the many other characteristics which in sum determine the successful librarian. (p. 411)

Rayward (1983) quotes Robert Maynard Hutchins from the 1936 Stores lectures at Yale to the effect that vocationalism “leads to triviality and isolation” (p. 1315). This, we note, is exactly the kind of impression that has accompanied the closure of a number of graduate schools. Any emphasis on the practical, Rayward continues, “even if it were possible to succeed with it, interferes with the education of the student” (p. 1315).

The anti-practical argument is still very much alive when it comes to graduate library education. White (1991) treats it as “that most fundamental question of whether we educate for a profession or train for a job” (p. 69). He goes on to say: “The uniqueness of education as contrasted to training (and the two are classically contrasted) is that even twenty years on the job is not likely to provide a substitute for education” (p. 69).

Richard Budd (1992), dean of the Rutgers library school, asserts that “the prime goal of any act of education is that it should serve us in the future...take us somewhere...let us move onward more easily...Without these critical ingredients, we are in fact not educators, but, rather, ‘trainers’” (p. 46). As to the value of training: “[A]ll training becomes almost immediately obsolete. That ongoing process of training can be handled by supervisors or vendors” (White, 1995, p. 44).

At the community college training level, experience and intent may well differ. Rabago (1994), for example, quotes a student who would like “as much as another year of practical skills application” (p. 14). Many of the community college programs avowedly emphasize practical skills—for all levels of employees.

THE ROLE OF INFORMATION SCIENCE IN LIBRARY EDUCATION

While much of the history of librarianship has been preoccupied with combining a broadly humanistic background with developing clerical and retrieval techniques in, often, the same person, there has been in recent decades an increasing call for an intellectual base that can stand on its own rights. While automation may have forced the issue, the need has been

seen as a need to unify practice and theory—aside, really, from the humanistic knowledge and value set of traditional librarianship. Kaplan (1965) writes:

The intellectual foundation for library science must be in this group of metasciences—logic, linguistics, mathematics, theory of information, and so on. . . . not because they underlie. . . technology. . . but for an intellectual reason, because there is central to them the concept of structure, of order, of form, which seems to me to be the central concern of library science....Either you are interested in order, structure, form or you are interested in substance and content; and in the latter case you must resign yourself to mastering some increasingly narrow subject area and to doing whatever you can in the course of that work as little assistants or magic helpers or something of the kind to the people working in that area. (pp. 8-9)

In the view of a number of leaders, information science is what will bring the profession to full flower. Robert Hayes (1965) suggests “system design as the crucial concept of information science” and “information science [as] the theoretical discipline of librarianship and library science as the professional one” (p. 52).

With information science behind them, librarians need no longer be mere “little assistants or magic helpers” to people doing real work. Writing in *Wired* about the University of California at Berkeley’s School of Information Management and Systems, Brian Caulfield (1997) sees the new director’s view as one where, “like the primates who escape from subservience in *Planet of the Apes*,” we will have librarians “crawling out from behind their card catalogs to rule the global datasphere.” Caulfield sees Hal Varian, the school’s director, as “the ideal spokesman for the new wave in library schools.” No little helpers these, “there will be a larger role for people who organize, filter, and locate information. . . . This is no longer a library school. . . . This is a new school to train people for new job markets.” Information managers will become ubiquitous. “In any organization, someone is going to have to do it” (Caulfield, 1997, p. 64). Varian’s librarians will of course be outside the library.

Many librarians still have reservations about “these newly wired M.L.S. androids. . . . Do you want one of these technocrats facing your public?” (Manley, 1986a, p. 35). Manley decries the tendency of systems people to “translate all human endeavors into the language of electronic circuit schematics. . . perplexing problems . . . routinely diagrammed as though they were simple declarative sentences” (p. 35). We note further that it is an experienced librarian who suggests courses in photocopiers, deviant behavior, and recycling as covering the skills actually in demand at the work sites (Cole, 1993, p. 57).

CURRENT ISSUES

The persistent themes discussed earlier approach the theologic status of mysteries. Their debate or exploration is endless, but solutions are

not necessarily possible or relevant. The literature also suggests, however, a number of current issues that need some conclusive answers either within library education or from the field itself.

Some of the most important issues can be grouped as follows: (1) a downshifting and role blurring with regard to library tasks, (2) a growing self-awareness and need for recognition among support staff, including the emergence of terminology for library positions as a sensitive issue, (3) a growing interest in some levels of certification in addition to that which may be required for positions open only to M.L.S. holders, (4) new levels of access to continuing and distance education for all levels of staff both in relation to current jobs and to a career ladder, and (5) renewed interest in adequate compensation with regard to newly downshifted duties and, again, in terms of a career ladder.

Downshifting and Role Blurring

While Oberg et al.'s (1992) "The Role, Status, and Working Conditions of Paraprofessionals" may be the centerpiece of any list of examinations of the shifting of library duties away from what is described in the traditional rhetoric, there is now a large body of literature documenting, expanding on, and illustrating the shift. Rider (1996), for example, in "Developing New Roles for Paraprofessionals in Cataloging," shows how integrated library automation systems and the growing availability of an international body of cataloging copy is requiring a more flexible and involved paraprofessional staff in technical services.

Kemp's (1995) "Reevaluating Support Staff Positions" makes similar points in the area of interlibrary loans and goes on to show the use of the Position Analysis Questionnaire to help bring the personnel system up to date. The November/December issue of *Library Mosaics* (1996) is devoted to six treatments of support staff in reference work. Huling (1996) reports on a panel discussion at a state library association convention (Washington) where "panelists and audience alike were less interested in arguing the merits or demerits of having paraprofessionals on the reference desk than in focusing on how it works in practice" (p. 19).

Turner and Grotzky (1995) document the use of paraprofessionals in library instruction. Cottam (1986), in a discussion of the appropriateness of an M.L.S. credential, documents a further range of paraprofessional duties including personnel work, online searching, and supervision. *Library Mosaics* (July/August 1996) is devoted to "a day in the life" diary issue for support staff activity and documents an overwhelming array of duties being performed.

This downshifting, largely accompanied by, or as part of, automation, is not without tensions. In a study of "The Impact of Computerization on Library Support Staff," Palmi (1994) found that over half the staff were finding more satisfaction, but that 13 percent had strong feelings of less

satisfaction (p. 123), one commenting: "Before computerization, I felt like my workload was reasonable and procedures were relatively stable. Since computerization, the workload is impossible, and because of the ever-changing procedures, staff have trouble digesting everything, resulting in inconsistent work and frustration" (p. 123). Another states that "although learning new methods has been challenging, the old methods were more peaceful" (p. 126).

In that the rhetoric in libraries has not caught up with actual practice, and given that in many, if not most, institutions delegation has been more ambivalent than complete, and given that the M.L.S. staff has not defined a clear role for itself, it is not surprising that there is a considerable blurring of roles in the eyes both of observers and of the staff itself. Generally speaking, personnel and compensation systems have not caught up (or caught on) either, leaving a fertile ground for resentment all around.

Support Staff Self-Awareness

A groundswell of self-awareness and identification with library work is implicit in much of the above discussion and references. The wide participation in the initially frustrating but ultimately very successful "Soaring to Excellence" teleconferences is further evidence. Much of the discussion, when support staff themselves are involved, has to do with adequate recognition. St. Lifer (1995) reports that "almost four of ten paraprofessionals working in public libraries say they don't get the recognition they deserve, while nearly half of those working in academic libraries say they feel the same way" (p. 30).

The *Journal of Education for Library and Information Science* devoted its Winter 1995 issue to "Educating Support Staff." In that issue, Ed Martinez (1995), in an article on encouraging support staff to write—to tell their story—reports that *Library Mosaics*, the magazine he edits for support staff, "is accused by librarians of serving no purpose, except to raise expectations and create problems for librarians and support staff" (p. 39). Given the existence of *libsup-l*, *Library Mosaics*, *Soaring To Excellence*, the *Issue Papers* arising from the World Book-ALA Goal Award Project on Library Support Staff (1991b), the Web-based *Library Support Staff Resource Center* (1995), and the ubiquity of e-mail, we think it is too late for librarians to be worried that support staff will talk to each other.

Certification

Certification is applied to individuals as a social means of quality control among the practitioners of the certified occupation. Accreditation of educational programs serves much the same social purpose (in addition to protecting the aspirants). The two activities can be intertwined as, for example, in Washington State where certificates are issued to graduates of accredited M.L.S. programs without further examination. Certification for support staff emerged as Issue Paper # 1 of the World Book-ALA

Goal Award Project on Library Support Staff (1991a). Many versions of certification are under consideration—national, local, government-run, association-run, voluntary, and involuntary. In our view, once support staff in general are found to want a certification mechanism, all the players in the library community should help it happen in such a way as to strengthen the community as a whole while providing all the benefits sought by those being certified.

Continuing Education

If we define continuing education as that which meets the educational needs of the library staff, the issue becomes one of institutional support and for whom. Who is assigned to leave the irregular duties to learn or be trained on a new piece of software? Who gets to go to conferences and workshops? Who gets leave or release time to work on a certificate or a degree? Who is encouraged to take internships at other institutions?

A relatively new issue is the availability of distance education. Could, say, a library associate in a state without a library school be working on an M.L.S. via the terminal? Would the library negotiate something about out-of-state tuition?

If we take a narrower view of continuing education and think primarily of the kind of training staff may need to meet a change in software or a shift in cataloging rules, our discussion of downshifting and role blurring should make it clear that staff at all levels may need such training and that the training courses need not be aimed at only one level of personnel—generally, their needs will be the same even if they put the skills gained to different uses.

Career Ladder

Library rhetoric has included the notion of a career ladder since the "Library Education and Manpower" statement (American Library Association, 1970). But the ladder has not been implemented to a degree that has been satisfactory in terms of "growing our own" and promoting people in libraries in a way that taps their potential or their ambition. We think that distance education, enlightened personnel policies, and an internal consensus on working together could make for a stronger profession. We note that compensation and advancement emerged as two of the ten major issues of the World Book-ALA Goal Award Project on Library Support Staff (American Library Association, 1991b).

CONCLUSION

From a systems viewpoint, a librarian may be seen as a black box which actively selects materials to ingest and regurgitates them in response to user needs via an internally generated index. A typical block diagram of

such a system is shown in Figure 1. There is wide agreement in the profession that staff without the M.L.S. are handling the internal workings on the input side. For example, technical services is, by and large, run by technicians. The Oberg (1992) study, now among others, shows that technicians are doing the same at the output end. Initial queries, user training, and interlibrary loans are all being done more and more by support staff. From a systems viewpoint, input and output are parallel processes. The same tools are used to profile a query as are used to profile the items collected. From a rational point of view, the same intellectual skills should suffice at either end. Consequently, if a major library system can outsource selection on the input end, may we expect a parallel delegation of duties at the output end?

M.L.S. librarians have abdicated the system-building portions of their traditional jobs either by assigning them to internal technical staff or by

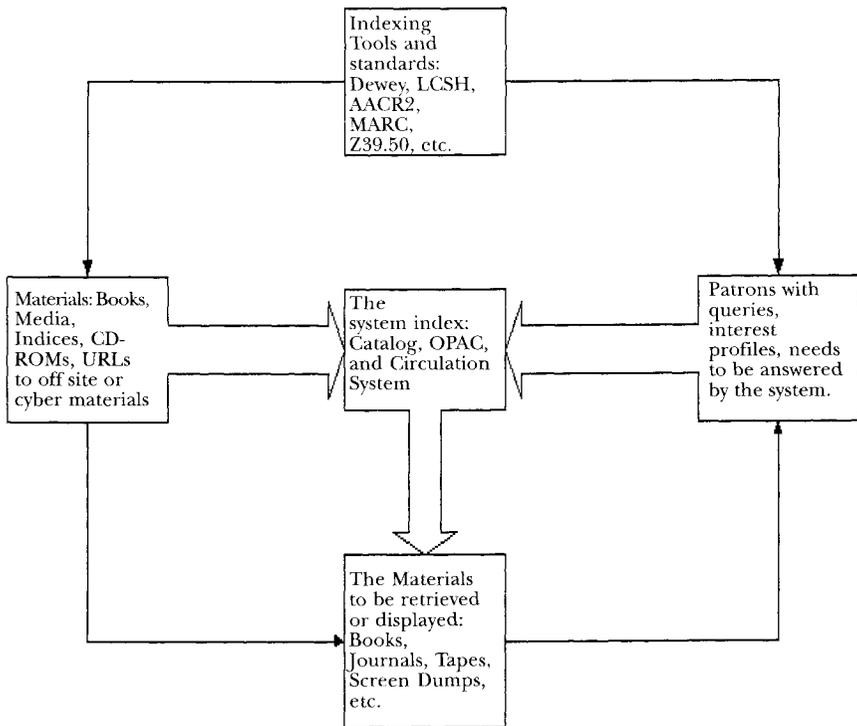


Figure 1. A systems view of the traditional library.

outsourcing system design to the Library of Congress and the OPAC vendors. Public services are sure to follow, as should be the case. Librarians do not have much to complain about. They did not enjoy original cataloging and, if they were in public services, claimed not to understand it. Yet the national systems and standards are now in place. Anyone with a terminal can access a bigger and better authority file than could be imagined locally. OPACs and circulation systems are purchased off the shelf. Keyword searches, available since the 1970s, are now pervasive and preclude the need for knowing what to look for to be able to quickly obtain useful results. In short, the system and its workings have become teachable, learnable technical skills. Faced with an eager and increasingly self-aware and networked majority of library workers, M.L.S. librarians will find it both unseemly and destructive to cling to duties that can be done as well by support staff.

We know what the support staff is doing: They are running the machine that was built by the rules and standards and precedents invented by the librarians. We can wish them well and assist them in getting the training and recognition they need. What is not so clear is what the librarians should be doing.

Librarians could fall back on their humanistic liberal traditions, and we think some of them should. The "guerrilla librarianship" practiced by librarians in San Francisco and elsewhere to protect worthy books from being discarded to make room for computer terminals is a case in point. In general, however, we do not think that presenting the public with our bookish expertise in, or appreciation of, *Jane Eyre* or the French Revolution is going to cut it any more. A good deal, but not all, of what we intended when we asked for a librarian to have a liberal education was that the librarian not be ignorant. Television may not have brought culture, but it has virtually eliminated the kind of ignorance that could exist in American villages at the turn of the century. It is hard to find anyone ignorant enough to sit impartially on a jury. Neither do we think that most librarians should become the "newly wired androids" that Manley objects to above, though some will need to, and some will want to, and some will be needed.

Rather, we would advocate for librarians who have the kind of knowledge and skills that are presently thought of as post-graduate work for librarians or undergraduate work for information scientists. We would expect librarians to retain their humanistic values, as well as many of their technical skills, but also to be skilled and knowledgeable in information anthropology, memetics, and whatever other disciplines give them a view of the social import and effect of their institutions. Current business management gurus can speak of a company, especially one with a terminal at every workstation, where every employee is constantly aware of his effect

on the bottom line and adjusts accordingly, while top management looks to see the effects the company is having on society. If the employees keep the machine running better and better all the time, and management keeps it aimed at a vision of something that is of value to the world, the company is supposed to prosper.

The ALA standards for "Library Education and Personnel Utilization" (1976) and the "Criteria for Programs to Prepare Library/Media Technical Assistants" (1979) are thoughtful documents reflecting ideal educational and staffing environments for some time in the late 1950s. Both are under review. We need a revision of both that looks forward, not back, and which reflects the downshifting of duties demonstrated by Oberg and the upshifting of expectations and enthusiasm demonstrated by "Soaring to Excellence" teleconferences, *Library Mosaics*, and the Library Support Staff Resource Center (1995) on the World Wide Web.

Librarianship, with its distinctive abilities to provide something of value, needs vision that will bring together all the players in a matrix that satisfies all of their needs for education, recognition, potential upward mobility, and a feeling of continual growth. Technology, with its potential for distance education and worldwide instant and affordable communication, has removed the oft-cited geographic barriers (see Figures 2, 3, and 4). Given the vision and the will, the future looks bright. Without vision and will, we may well find ourselves relegated to nostalgic reading rooms, guided by docents, and nourished by androids.

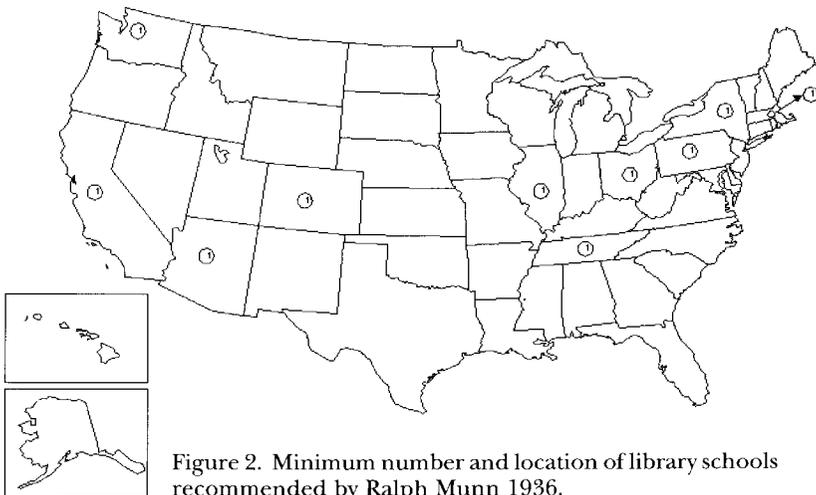


Figure 2. Minimum number and location of library schools recommended by Ralph Munn 1936.

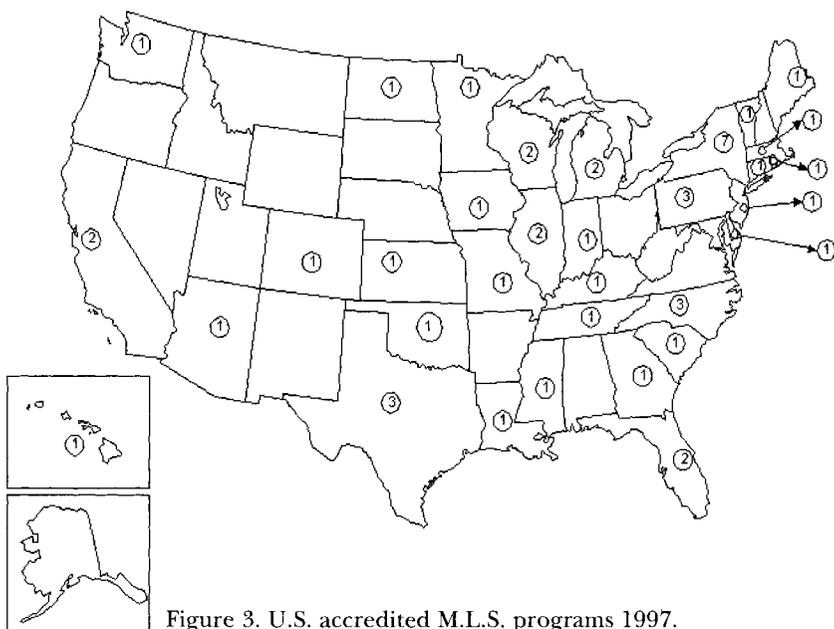


Figure 3. U.S. accredited M.L.S. programs 1997.

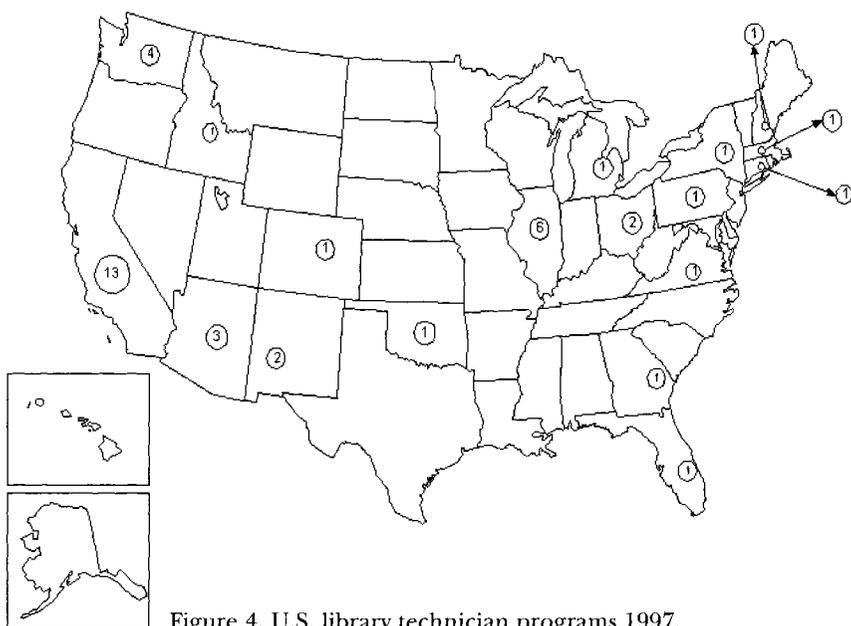


Figure 4. U.S. library technician programs 1997.

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APPENDIX

LIBRARY EDUCATION CHRONOLOGY

Date	Event
1829	Schrettinger (Germany) proposes that there must be schools to train librarians
1876	ALA established
1887	Dewey establishes School of Library Economy at Columbia
1890	Pratt Institute begins library training
1891	Drexel Institute begins library training
1892	M.S.R. James recommends pre-employment training
1897	Armour Institute begins library training
1900	A.G.S. Josephson advocates two-year (vs one-year) training programs for library work ALA committee recommends stronger participation in library education, including endorsement
1901	Plummer describes three methods of learning librarianship, one of which is formal schooling
1905	ALA recommends minimum of 2-3 years' college as prerequisite for admission to library school
1906	First MLS conferred
1911	ALA Round Table of Library Instructors formed
1915	Association of American Library Schools founded
1923	C.C. Williamson's Carnegie Commission Report, "Training for Library Work," advocates appropriate levels of training for both professional and clerical levels of library work
1924	Board of Education for Librarianship formed Draft report of Temporary Board provides for classes of library schools
1925	Minimum requirements for accreditation (standards) developed
1926	University of Chicago Graduate Library School founded with Carnegie money
1933	Accreditation standards revised
1936	Munn study finds: library education overemphasizes details
1937	Los Angeles City College offers one course in library assistance
1942	Metcalf study finds library school instruction is low quality and too elementary
1946	J.P. Danton advocates junior college library training J.L. Wheeler study shows there has been little improvement since Metcalf study

	Wheeler makes recommendation for inclusion of Administration as a subject for library curriculum
1948	USDA Graduate School offers the first library technician training program ALA midwinter conference recommends professional librarians be trained only at graduate level and technicians only outside universities
1949	Ballard School of New York City YWCA, with Special Libraries Association, establishes clerical practice course for special libraries Errett W. McDiarmid coins phrase "library technicians" and defines "nonprofessional duties" E.J. Reece expresses concern about image of librarians doing routine work in "Tasks and Training of Librarians"
1951	New accreditation standards, along with move from Board to National Councils for Accreditation
1958	ALA-recognized technician program in Middleton, New York, fails due to professional disagreements; leads to persistent negative attitude in ALA
1959	California gets state-level endorsement of two-year technician training programs Standards for undergraduate training put forth
1962	First Canadian library technician program instituted Manpower Training and Development Act passed
1963	Vocational Education Act, Title III leads to expanded vocational training programs John Sherrod at American Documentation Institute Meeting asserts that lack of trained support staff is weakness in library education
1964	ALA concern about manpower shortage, together with Economic Opportunity Act, sets scene for expanded use of para-professionals ALA Office for Library Education founded
1965	"New careers" becomes buzzword in vocational education and ALA takes stand to discourage two-year programs which are seen as producing "cheap librarians"
1966	Society of Library and Information Technicians founded Canadian Library Association affirms need for library technician category of employee US Civil Service GS 1411 series recognizes library technician grades 4-7

1967	ALA Administration and Education Divisions endorse junior college programs Council on Library Technology (COLT) formed (by professional librarians) MARC Pilot Project instituted Washington Library Network becomes concrete proposal
1968	ALA's Deiningner committee recognizes both library clerks and library technical assistants Louis Shores et al. publish <i>The Tex-Tec Syllabi</i> , a curriculum for training library technical assistants in Texas
1969	Vocational Education Act Section IV C leads to summer institutes on training library technician teachers Lockheed develops DIALOG search language World Group on International Standard Bibliographic Description (ISBD) set up at International Meeting of Cataloguing Experts meeting in Copenhagen ALA publishes "Criteria for Programs to Prepare Library Technical Assistants: Statement of Policy"
1970	Asheim statement, "Library Education and Manpower," becomes ALA policy
1971	OCLC goes online U.S. Office of Education publishes <i>Library Technical Assistant: A Suggested Two-Year Post-High School Curriculum</i>
1972	DIALOG becomes online service Accreditation standards revised
1973	COLT affiliates with ALA
1974	H. Martelle, Sacramento, proposes civil service test for librarians to become certified without MLS ALA publishes Ch. 6 of Anglo-American Cataloging Rules, North American Text, to incorporate ISBD
1975	Medical Library Association adopts new certification code for librarians and library technicians E. Gains, Cleveland Public, proposes route to professional status via field experience and demonstrated competence in the field
1976	COLT affiliation with ALA becomes official and implies mutual recognition of value to library community Australia adopts national guidelines for library technicians Bibliographic Retrieval Service (BRS) founded
1977	Washington Library Network is online with default keyword title searching

1978	Graduate School of Librarianship closes at University of Oregon
1979	Library Technician Section formed in Library Association of Australia
1980	Conant Report appears
1982	COLT assists in revision of S-1411 series of federal civil service system and in library series in <i>Occupational Outlook Handbook</i> Canada adopts guidelines for library technicians
1987	New Jersey Association of Library Assistants becomes first state wide independent library assistant association
1988	New York State Library Assistants' Association ratifies constitution and becomes second statewide assistants association
1989	John Berry editorial "The Other Librarians" appears in <i>Library Journal</i> North Carolina Library Paraprofessional Association formed <i>Library Mosaics</i> begins publication
1991	Oberg editorial "Paraprofessionals: Shaping the new reality" published in <i>College & Research Libraries</i> (Jan.) Forerunner of ALA Support Staff Interest Round Table has first meeting World Book/ALA issue papers published COLT incorporates <i>National Directory of Library Paraprofessional Associations</i> published
1992	In January, Oregon Library Association Library Support Staff Round Table is established Accreditation standards revised Larry Oberg's article "The Emergence of the Paraprofessional in Academic Libraries: Perceptions and Realities" appears in March issue of <i>College & Research Libraries</i> "The Role, Status, and Working Conditions of Paraprofessionals: A National Survey of Academic Libraries" authored by Oberg, Mentges, McDermott, and Harusadangkul, appears in <i>College & Research Libraries</i> LIBSUP-L, the discussion list for library support staff, is created Washington Association of Library Employees (WALE), a division of Washington Library Association, conducts its first state-wide conference for library support staff
1993	Southeastern Library Association (SELA) Paraprofessional Round Table is formed Paraprofessional Donnetta Sheffold is elected secretary of Oregon Library Association Board

	Paraprofessional Stephany Liptak is elected president of Colorado Library Association
1994	In July, first issue of <i>ASSOCIATES: The Electronic Journal for Library Support Staff</i> is published Support Staff Interests Round Table of American Library Association is officially formed
1995	Soaring to Excellence teleconference for support staff is held Winter 1995 <i>Journal of Education for Library and Information Science</i> (36:1) devotes entire issue to library support staff NYSLAA implements "Certificate of Achievement" Program Entire Spring 1995 issue of <i>Southeastern Librarian</i> (45:1) coordinated by SELA Paraprofessional Round Table During entire month of June, workshop entitled "The Library Support Staff Movement: the Milestones, the Vision and the Road Yet Travelled" conducted online via LIBSUP-L University of Pittsburgh advertises for Electronic Text Librarian (MLS); required skills include HTML, SGML, HTTP, and Novell Netware Library Support Staff Resource Center officially opens Web site
1996	Second Soaring to Excellence teleconference is held

The table above is in large part a synthesis of earlier chronological work, the most significant being Beattie (1976) and Gillen (1995). Other works that were useful include Nasri (1972), Reeling (1993), and Martinez (1997).