Introduction

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IT IS A PLEASURE to bring you this issue of *Library Trends* focused
on the educational foundations for library and information
management careers in corporate environments. Professions operate
in an environment in which one competes with another, as was
convincingly presented by Andrew Abbott (1988) in his book entitled
The System of Professions: An Essay on the Division of Expert Labor.
Abbott demonstrates that there are multiple professional claims for
jurisdiction over problem and service areas and more than one view
exists on how to diagnose the problems and prescribe the cures. His
explication is relevant to the topic of this issue, therefore a summary
of some of his points is useful to an understanding of the discussions
included here.

   According to Abbott there are three elements of professional
practice: diagnosis, inference, and treatment. To assert expertise, a
profession claims to hold the keys to the identification of the real
problem, to have the knowledge to analyze the risks and the benefits
of treatments, and to develop treatment systems and prescribe
appropriate treatments. But, in a competitive environment, there are
vulnerabilities for any profession in each of these areas. Even the
definition of the work of the profession can be challenged by other
professions with definitions that place the work within their own
domains.

   Beyond this basic framework of the competitive environment
in which professions exist, Abbott provides many insights into the
way that this competition works. The following five points from
his work are particularly relevant here:

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1. A profession that is doing mostly routine work is vulnerable to incursions; procedures and processes that are routine are obvious targets for deprofessionalization. Claims that routine work must be done by professionals so that unusual cases will not be missed are used by some professions to retain their jurisdictions. Claims that nearly all of the cases are nonroutine "does not persuade external critics" (p. 51).
2. The public's view of a profession develops over a period of a decade or more and does not change suddenly no matter what changes the profession itself makes in terms of the character of the work, the educational foundation, etc. The public seems to remember professionals in the image it first saw them and that image is fairly stable (p. 61).
3. Librarianship had a clear objective in the beginning: to organize collections of printed materials in libraries. By virtue of this place-bound definition of its jurisdiction, librarianship faced little competition from other professions. But the place limitation has disappeared with the advent of electronic media, telecommunications, and networking. Now computer specialists and others are claiming a treatment substitution; they accept the diagnosis but claim to be able to prescribe the treatment more effectively and more efficiently (from the case study on librarianship, pp. 217-24).
4. A profession is increasingly vulnerable to loss of jurisdiction from competition if its results cannot be clearly measured, if its treatments are general and not specific, if the human characteristics of its clients are not adequately considered in the treatments prescribed, and if its treatments do not ameliorate the problem (pp. 46-48).
5. If the academic knowledge system fails in creating new treatments, diagnoses, and inferences for working professionals, professional jurisdictions are gradually weakened (p. 57).

Obviously, these points apply to library/information management in corporate environments. Too often professionals are perceived to be doing routine work; the public image of librarianship does not match the skills and knowledge that today's professionals have, therefore creating the need to constantly promote a new image. Too often the treatments prescribed are general rather than specific and there is little evidence that these treatments are effective. Academic institutions are perceived to be weak in conducting research that increases understanding of information management problems and the effectiveness of various treatments.

To label corporate library/information management as special librarianship is to belie the great turmoil and new paradigms that are emerging as information managers with different skills seek to solve the information management problems formerly secure within the realm of librarianship. It is not clear, at this point in time, what jurisdictions librarianship will continue to claim as its own. With changing professional jurisdiction and new market opportunities, it is not certain what the nature of the new profession will be and what skills and knowledge should be taught in preparation for that career. As the contributors to this issue indicate, the profession of librarianship is re-examining the educational programs established to prepare professionals for the challenges of an expanded profession in this competitive environment.

Richard Willner, a corporate library manager, provides the lead article. He makes a strong case for a substantial adjustment in our understanding of the current requirements for the profession and for the formal education that supports it. He discusses the challenging financial strategies of organizations as they balance investment in technology with favorable impacts on the business results; the complexity of the information industry; and the absolute need for library professionals who can have a greater impact on information management decisions based on their professional knowledge and their management and communication skills. Library professionals, he says, who "[manage] client expectations with reference to the strengths and weaknesses of sources and delivery systems as well as their associated costs" require a "combination of source knowledge, system skill, analytical ability, communications skill, business interest, and drive." The educational foundation, he argues, should be theoretical—not job training—and should concentrate on the core of knowledge required by all in the profession. The educational experience should be intellectually challenging and provide excellent people the "array of strong skills" which will enable them to have mobility and advancement in the field—without that, the talent we need will not be attracted to librarianship nor will it be retained.

The succeeding two articles address the marketplace for special librarians. The first, by James Tchobanoff and Jack Price, expresses the view of corporate library managers in technical industries in contrast to the financial industry represented by Richard Willner. Tchobanoff and Price look at situations where the library operation is small in terms of the number of staff and isolated in terms of corporate support for staff recruitment and development. As employers, they specify six "levels" used to "evaluate potential candidates" for positions and four areas in which they expect the master's level programs to prepare the new graduates. They are looking for generalists who can learn the "local practices." They contend that special libraries are "distinctly different from public, school, or university libraries," and list the reasons why. Finally, they recommend that industrial librarians take on some responsibility for producing library school graduates that meet employer needs through engaging in two-way dialogues, sponsoring internships, becoming adjunct professors, and otherwise participating in the educational process.

Blaise Cronin, Michael Stiffler, and Dorothy Day report on a study they conducted on the "emergent market for information pro-fessionals." They analyzed job advertisements (both local and national), interviewed graduates of the University of Indiana's School of Library and Information Science who are working in nontraditional

positions in the state of Indiana, and conducted a mail survey of
alumni to get a picture of the qualifications needed in the U.S.
information sector beyond traditional librarianship. Their "gener-
alizations," based on the information they gathered, support our worst
fears: for example, the M.L.S. degree is "perceived by many
practitioners to be out of sync with the demands of the emergent
market" and library and information science (LIS) schools "will need
to revise not only their curricula, but also their culture if they are
to become successful players in this market"—the market "outside
the traditional library setting." The details of the responses provide
insight into the sobering challenges for LIS education. Their study
supports the need for "both subject expertise and business savvy"
in those who would work in information management positions
beyond the large institutional library settings.

Michael Koenig brings another point of view to the discussion
by pointing out the importance of computer technology to current
and future information management; the relationship of librarianship
to not only business but also to publishing, journalism, and other
information media; and the increasingly international orientation
of information transfer. Using the example of the demise of Columbia
University's School of Library Science on the one hand and the
movements toward combined programs in some universities, he calls
into question the "stand-alone" school of library and information
science. His view of the "core" for library/information science
education expands to include the design and creation of information
systems to handle internal data as well as externally created
information. The extent of the changes needed amount to a "polarity
reversal" from a service orientation to a more entrepreneurial
approach.

The next article by William Fisher and James M. Matarazzo
emphasizes the importance of continuing education as a necessary
component of professional life—a point also made by other con-
tributing authors. Given the brevity of the master's level library/
information science degree, the complexity of the professional
domain, and the explosive nature of the technological and
international changes taking place, continuing education is without
doubt necessary. This article also addresses the role of the Special
Libraries Association (SLA) in providing continuing education
programs and in providing guidance to formal library/information
science education. The SLA *Position Statement on Graduate
Education* is included as an appendix to this article.

Judy Macfarlane and Miriam Tees provide a Canadian perspective
to the discussion by reviewing the approaches of accredited schools
of librarianship in Canada to the preparation of students for careers

in special librarianship. For the six Canadian schools with courses in special librarianship, a table indicates the topics covered in the courses. A further discussion is also provided of the SLA's involvement with formal and continuing education, including its comments on the recent revision of the American Library Association's accreditation standards for master's programs as well as other educational initiatives. Emphasizing the need for continuing professional development, Macfarlane and Tees contend that "effective continuous education should be the norm rather than the exception" in order "to create a culture that accepts change as the norm...[and one] able to move quickly to meet the challenges of the 1990s and beyond."

Two contributing authors discuss educational models in very specific areas of librarianship where partnerships exist that link the subject area with information management in the educational process. Penny Hazelton's explanation of the educational preparation for law librarianship shows how things have changed in this field since the early twentieth century and how educational standards have developed to attempt to guide provision of the increasing knowledge and competencies needed to be successful in today's increasingly complex legal environment. Hazelton points out the necessity of marketing, use of retrieval and document delivery technologies and services, and library networking in for-profit law settings. Indeed, law librarians in academia also cannot escape the need to apply these techniques and must increasingly look for sources of revenue to support their services. The current educational model for law librarianship, Hazelton says, is probably not good enough to prepare new graduates for these challenges. Her explanation of the pace of the changes in law practice and the growing interdisciplinary and international nature of legal research makes it clear how difficult it is now to be a competent law librarian. It is difficult to attract and keep high quality law librarians when salary levels are still too low, career development is limited, and prestige lags behind other career paths in law. This focus on the practice of law librarianship and preparation for this career illustrates problems found in all areas of special librarianship. The *American Association of Law Libraries Guidelines for Graduate Programs in Law Librarianship* is included as an appendix to this article.

Ellen Detlefsen provides a tour of medical librarianship and its educational base and clearly demonstrates the extreme challenges to the very nature of the profession from increasing involvement in medical information management by the medical professions themselves. In the face of increased demands on medical information management knowledge and skills, the LIS schools are thinly staffed to provide the specialized courses needed. Cooperative developments

with other academic medical programs show promise but are only available in a few universities. But, the medical world provides some of the most inspiring examples of information professionals who are full members of hospital and clinical teams working together in patient care. And some very interesting and important doctoral research in medical subject areas is being performed in LIS schools. Detlefsen states that professional linkages to other health professionals and programs must be part of successful change in LIS education for careers in the health sciences.

Distilling the recommendations of the authors in these eight papers down to a few main points about the educational foundation for library and information management careers risks diverting attention from the richness of their thoughts. Nevertheless, some main themes are apparent. There is a recognition that our current formal educational programs must change quickly and substantially to meet the challenges of the future of information management in corporate environments. Change must include more movement toward interdisciplinary programs with other professional schools; an education based on core knowledge areas to prepare students for career mobility within library/information management positions; an educational core that includes information technologies, intellectual technologies[1] (Taylor, 1986); a focus on understanding and meeting customer (user) information needs, the economics of information, and management techniques; a market-driven and customer-centered approach to educational planning; and a high priority given to continuous education to renew knowledge and skills.

In 1985, Herb White and Marion Paris speculated that "it is possible that no single overall strategy can be devised (for educational preparation for the library field as a whole) and that it will be necessary to fragment our profession into a series of subprofessions, at least into a series of educational specializations" (p. 31). They thought that this would be unfortunate but perhaps necessary. Unless LIS schools can discover, teach, and advance the core knowledge areas needed by the growing market area of corporate information management, the fragmentation of the profession will be assured.

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NOTE

[1] Robert Taylor's category of Intellectual Technologies, one of his six foci for the education of information professionals, is an appropriate label for the heart of library science. It encompasses the methods used to organize information for storage, retrieval, and for communication in textual form, graphic structure, and visual image, including database design, indexing structure, and classification systems. His other five areas are Information Use Environments (understanding user needs); Availability of Data, Information, and Knowledge (understanding the generation and transfer of information); Information Systems and Analysis; Information Technologies; and the Economics of Information Provision and Use.

REFERENCES

Abbott, A. (1988). *The system of professions: An essay on the division of expert labor.* Chicago, IL: University of Chicago Press.

Taylor, R. S. (1986). *Value-added processes in information systems.* Norwood, NJ: Ablex.

White, H. S., & Paris, M. (1985). Employer preferences and the library education curriculum. *Library Quarterly, 55*(1), 71-133.