


Fall 1986

Special Libraries, Fall 1986

Special Libraries Association

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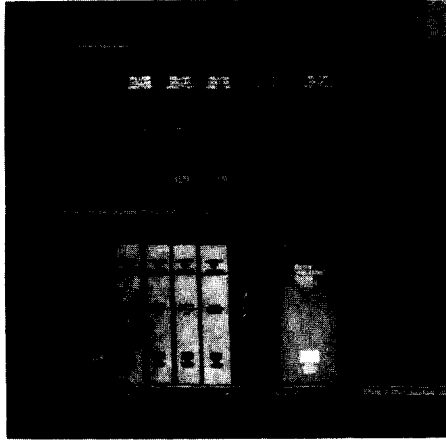
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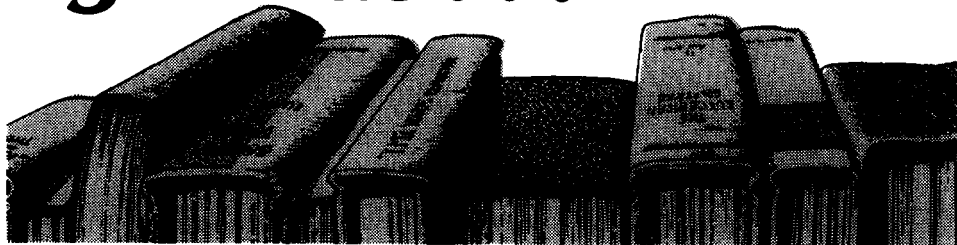
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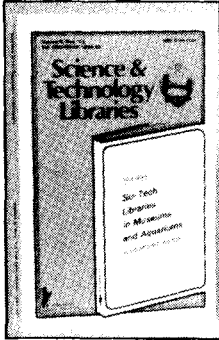
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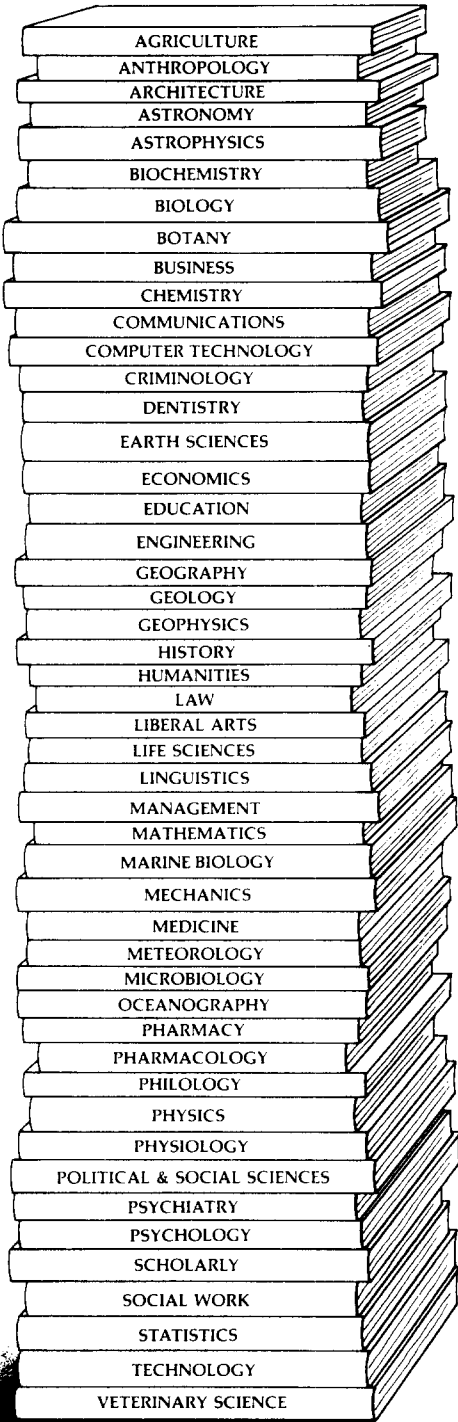
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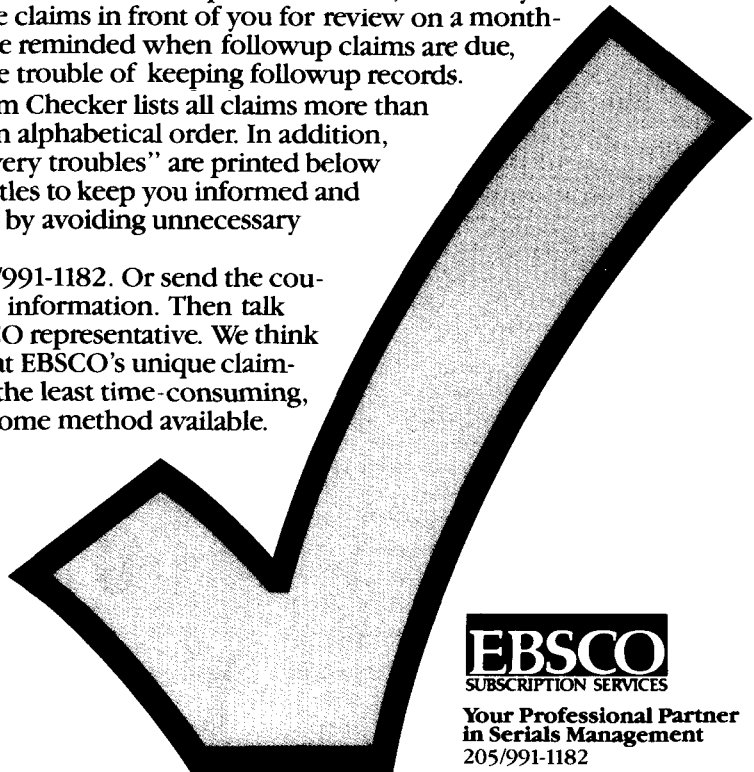
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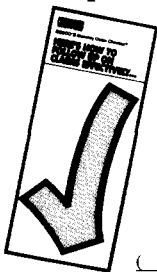


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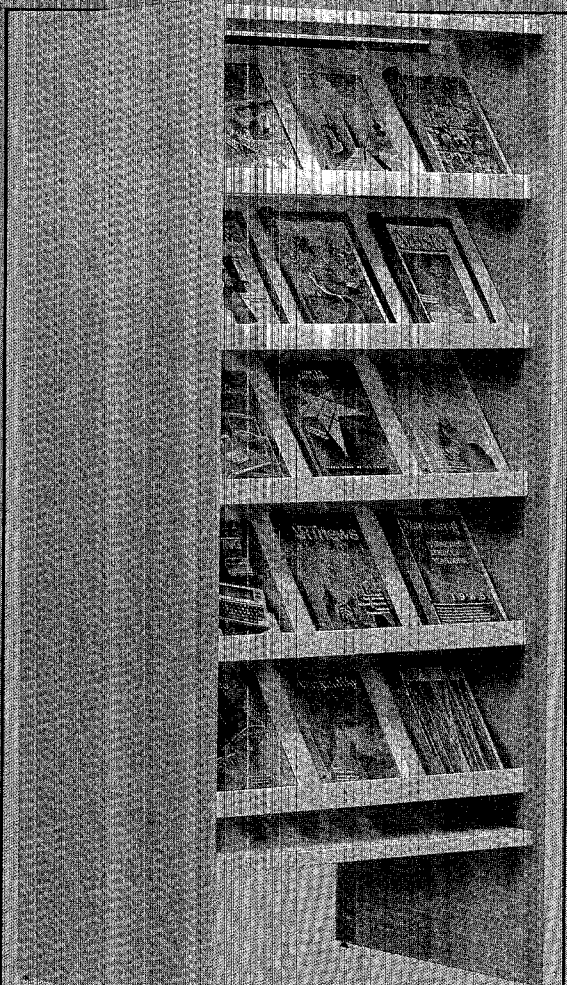
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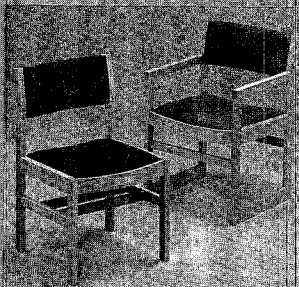
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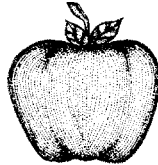
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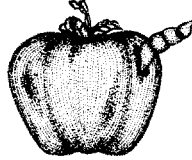
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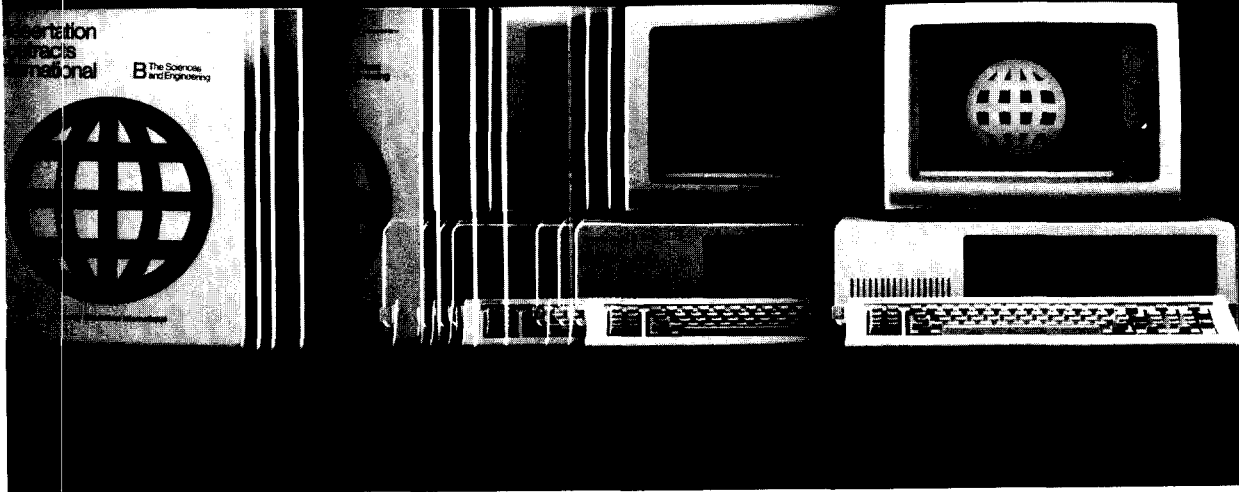


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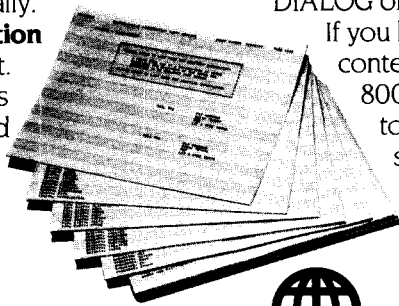
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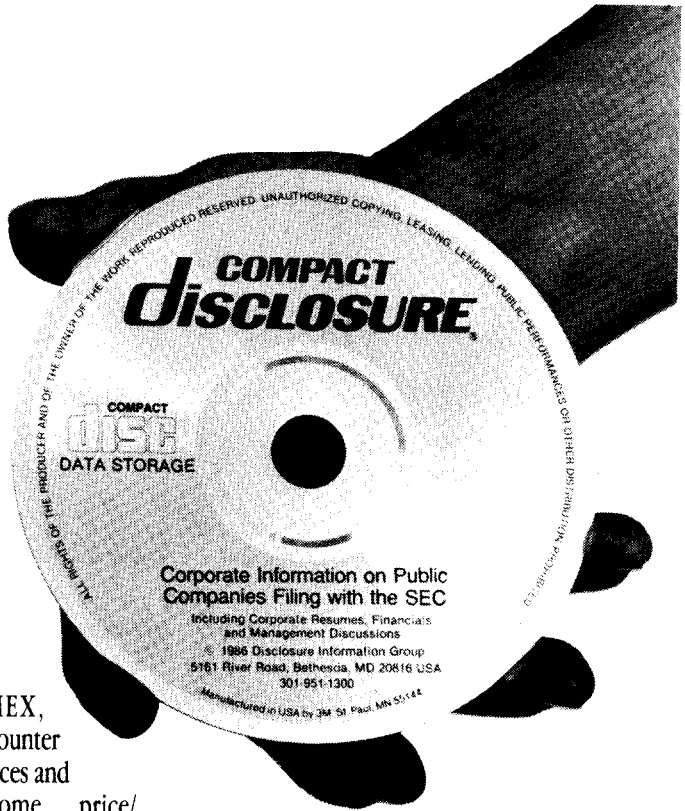


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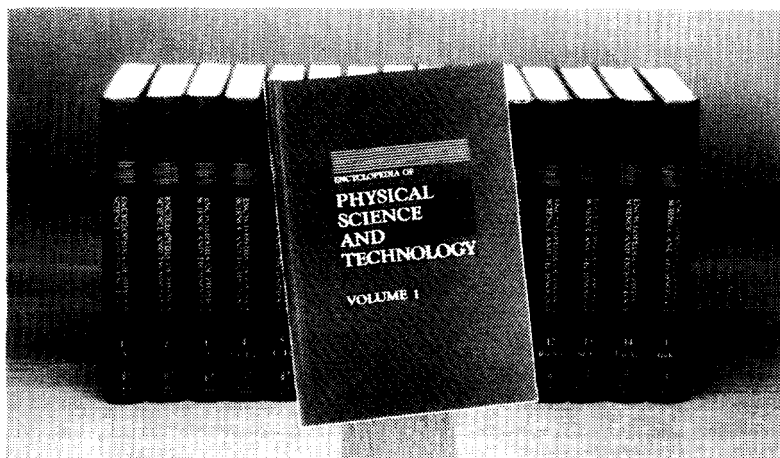
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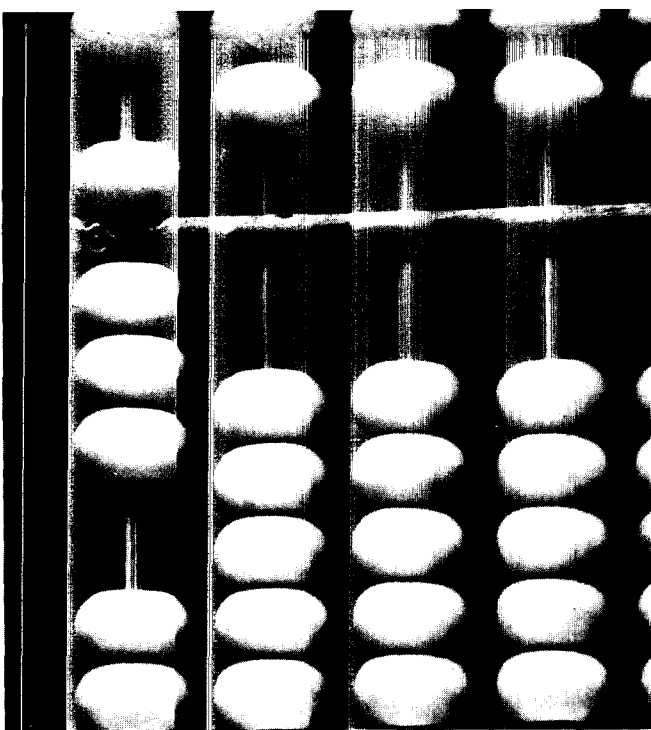
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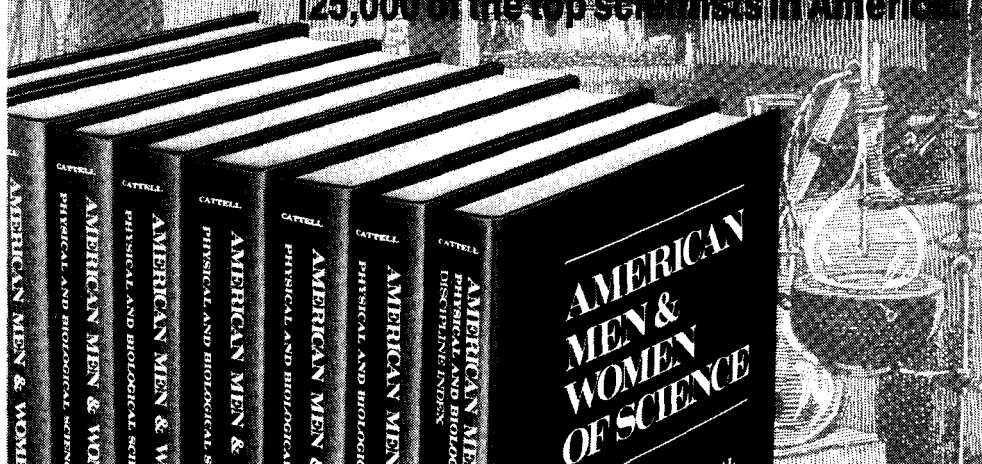
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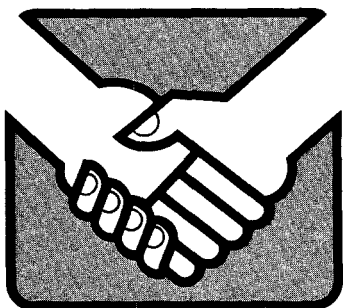
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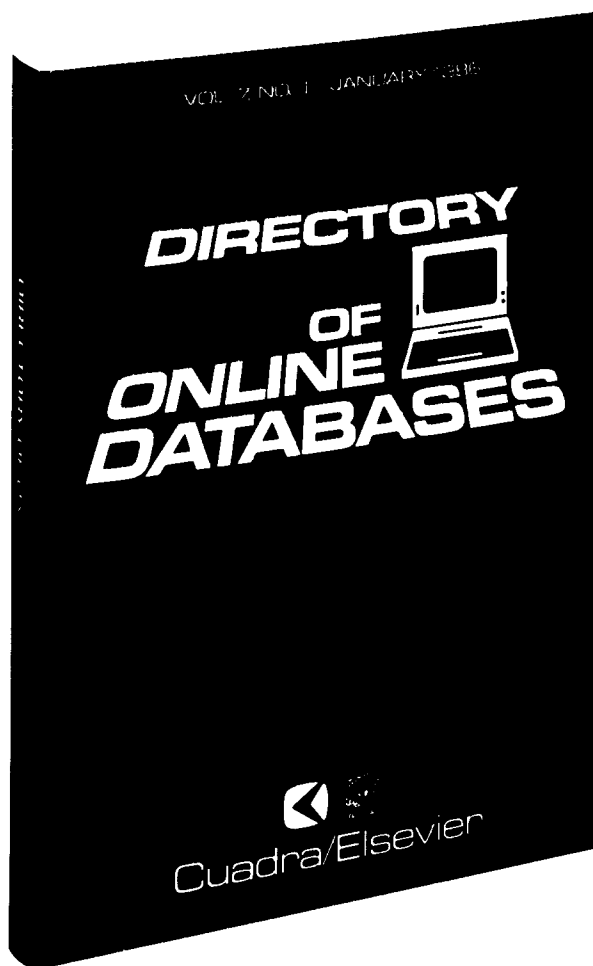
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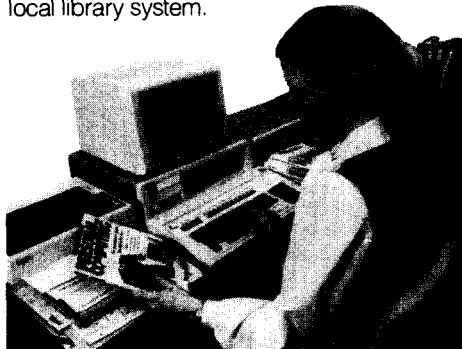
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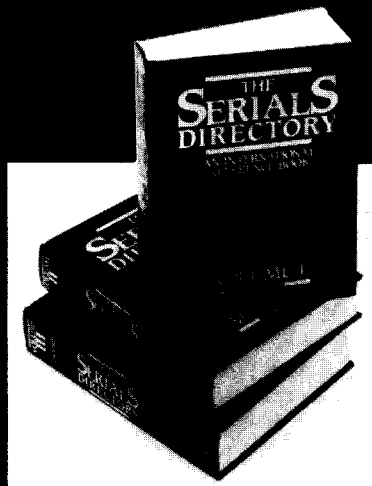
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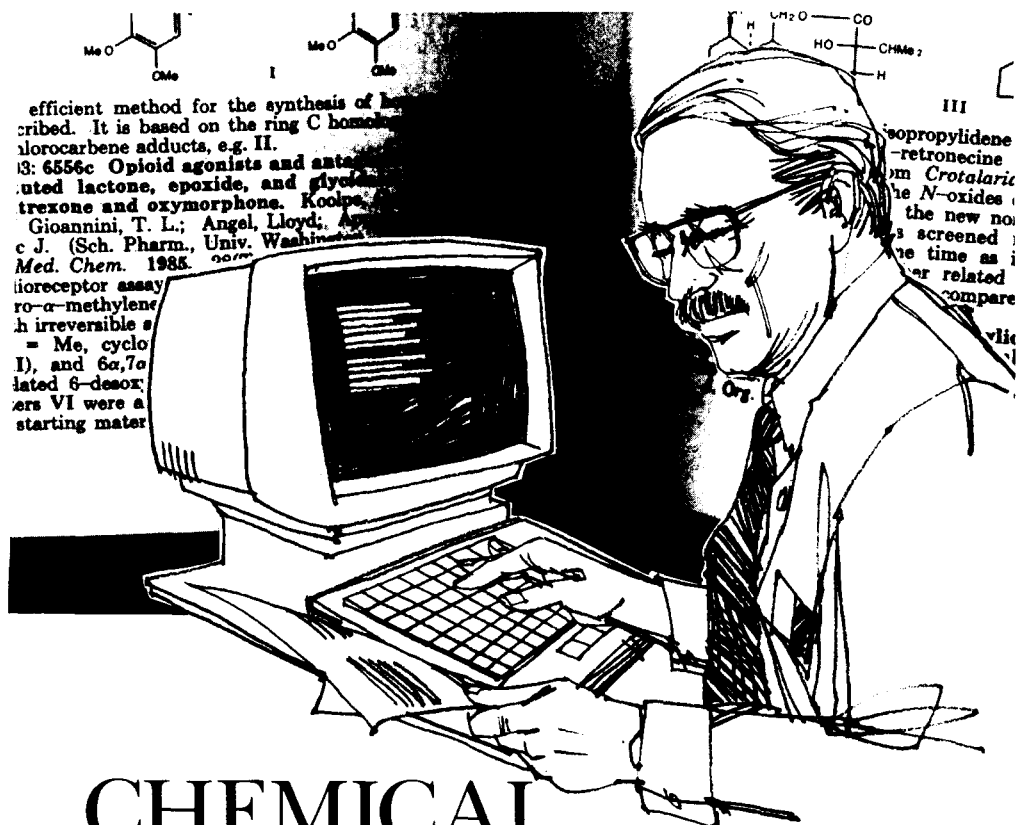
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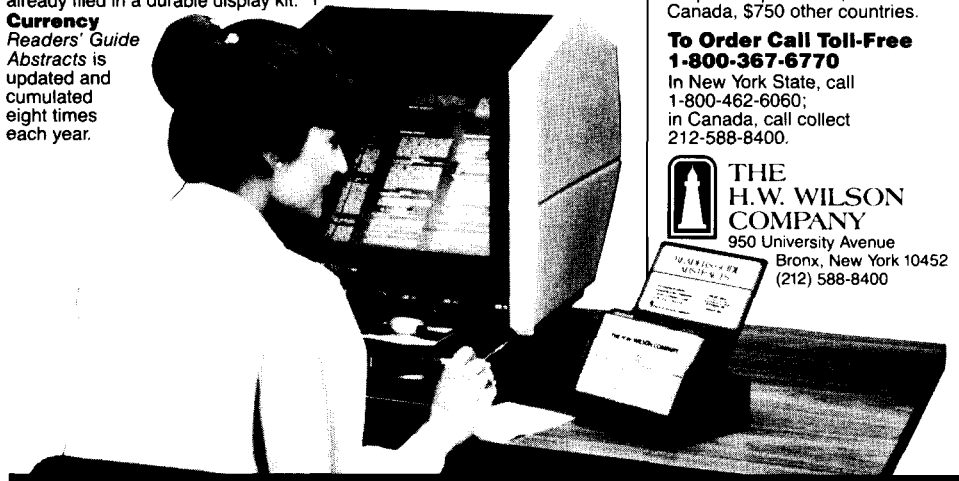
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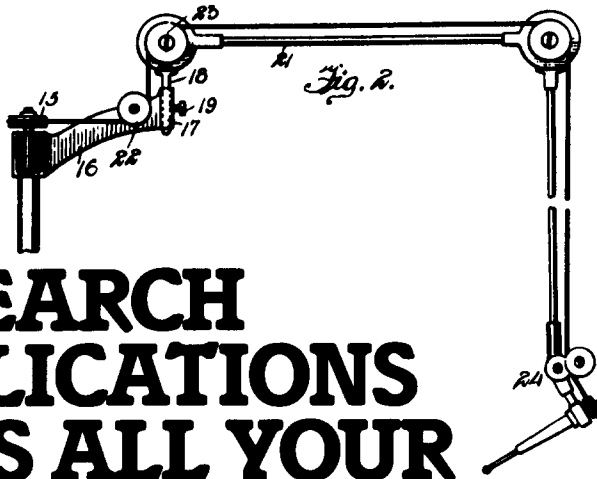
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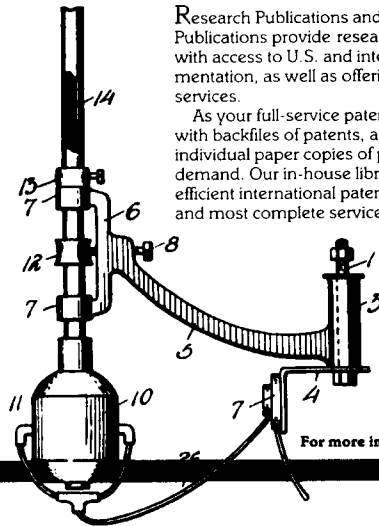


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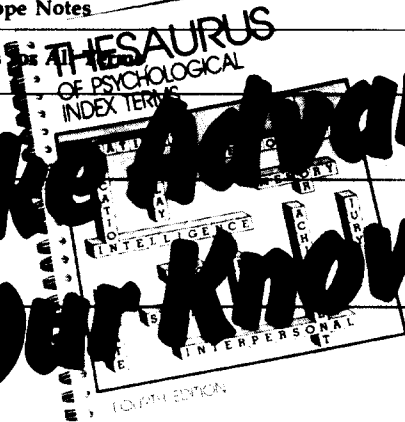
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Introduction and Overview

One hundred years ago Melvil Dewey designed a course of study which has evolved into our present structure of library education. Such centennials are times of celebration and reflection on the achievements of our past. It provides an opportunity to look at the present and evaluate it in terms of the past. More importantly it gives us an occasion to determine needs and develop plans for the future.

At the same time we are celebrating the centennial of library education, the Association is in the process of implementing various objectives related to its Long-Range Plan adopted in 1985. One of the six top priorities of the plan relates to Graduate Education and Accreditation.

The aim of this priority is to develop curriculum objectives for graduate library education and to become a full participant in the accreditation process for graduate library education. The Association feels a need to insure the graduates of our library schools will be equipped with the necessary skills and knowledge needed to function successfully in the environment of the special library.

Other objectives which make up this priority include developing means to identify and predict the future needs of information professionals and determine the ways library education could best meet these needs. The Association intends to develop guidelines for educating and training special librarians and to present them at a future conference of library school deans in 1988. All of these objectives are being developed through the work of the Association's Professional Development Committee.

In the pages that follow, leading educators and practitioners address these various objectives of the Long-Range Plan.

Edwin Cortez's article traces the history of education for special librarianship and raises serious concerns over library education today and its ability to answer the needs and reflect the "visions" of special librarians.

Miriam Tees' article discusses what special libraries are looking for in graduates as a result of a survey designed to indicate which abilities and knowledge practicing special librarians expect of new graduates. Along a similar vein Marion Paris and Herbert White present results of a comprehensive study of special librarians' opinions and attitudes about library education, again providing lists of priorities. Both of these articles provide a good start toward defining the competencies required for special librarians now and in the future.

Mary Culnan's article on "What Corporate Librarians Will Need to Know in the Future" looks at skills/capabilities required of future special librarians in the more specific area of the corporate world. She emphasizes our need to understand and respond to the rapidly changing environment and technology which surround us but emphasizes that this challenge can be met with the creative application of our traditional "tools of the trade."

An article on accreditation by Vivian Arterbery addresses the issues involved in SLA's participation in this complicated and controversial process. It also provides information on the major recommenda-

tions from the Committee on Accreditation (COA), which is funded by the U.S. Department of Education, and SLA's response to the COA Report.

Mary Frances Malone discusses the history of the Association's Salary Survey and its importance as a research tool on which to base some of our future decisions relating to library education curriculum and recruiting and its effect on the status of salary levels.

The state of the Association's Scholarship Program is presented by Muriel Regan, who concludes that the success or failure of the scholarship program is inextricably tied to the issue of special librarians' career opportunities and salaries which obviously are linked to the profession's educational programs.

A selection of deans from ALA accredited graduate library education programs discuss what they consider to be the most dramatic changes in library education.

Although each article has a unique focus, the concerns and issues raised in the discussions are frequently interrelated. Many of the issues raised have not been effectively dealt with by the Association and present its membership with a significant challenge.

Some of these concerns include:

- Is close to 80 years of progress in special librarianship reflected in the present system of library education?
- Is special librarianship a visible and proactive part of the education of its future participants?
- Can we practically define for the educators our needs in terms of curriculum and educational programs? Is a level of consensus possible?
- Is SLA prepared for the necessary commitment (both in time and money) required to become a partner with other library/information science organizations in the accreditation process?
- Are practicing special librarians prepared to accept responsibility for the future of library education by becoming involved on graduate school

advisory boards, recruiting and interacting with students, providing meaningful internship and practicum experiences, and accepting partial responsibility for the product of the educational process via the provision of sound on-the-job training and mentoring?

- Can the dilemma regarding the focus of library education between a sound theoretical knowledge in the properties of information versus subject expertise in specific types of libraries be solved?
- How to practically teach and keep up with a rapidly changing technology in the face of an information explosion and questioning relating to the basis of the profession itself?

Perhaps the most common issue found in the articles to follow was the one of recruitment. Each author raised the question in some aspect. Concern about the level of quality and qualification of students entering the special library profession is being voiced by many throughout the profession. In a recent dialogue concerning library education at the Annual Conference, a practitioner stated the maxim of what makes a piece of real estate a good investment—"location, location, location," analogous to that which makes for a sound and successful future for the profession—"recruitment, recruitment, recruitment." However, recruitment is not the sole responsibility of the library educator. It is a process and activity the entire membership must embrace. Only by attracting the "best and the brightest" can we insure a future for us all.

A second unifying thread evidenced in library education is the principle that learning is a life-long endeavor and that formal library education is but a part of that process. Clough & Galvin suggest "that the line between the end of education and the beginning of employment ought to be less sharply and permanently drawn." (*Special Libraries*, Jan. 84, p. 7). This feeling coincides with a time in the Association's history when the concept

of continuing professional development was determined by the membership to be the Association's top objective of its Long-Range Plan. In the face of a rapidly changing environment a life-long commitment to the educational process was clearly envisioned by the membership.

Another line we should attempt to draw less sharply is that between educators and practitioners. We must move toward more meaningful and frequent

dialogue. The authors of the following articles have raised many issues, some controversial, that can provide a basis for continued and productive discussion leading toward a brighter, more clearly directed future for special librarians and library education.

Hollace A. Rutkowski

Concept Director of The Franklin Mint

Graduate Education for Special Librarians: What Special Librarians Are Looking for in Graduates

Miriam Tees

■ A survey, sponsored by the Special Libraries Association, was conducted among 452 special librarians to attempt to identify what they want new graduates to know. High on the list were communication skills, reference skills, and an attitude of service. A need for ongoing dialogue between educators and practitioners and for recruitment of dynamic, intelligent people into the profession was evident.

The Long-Range Plan of the Special Libraries Association identified six priorities for the Association. Priority E deals with Graduate Education and Accreditation: "Develop curriculum objectives for graduate library and information management education and become a full participant in the graduate library/information management education accreditation process." At the time that these priorities were announced, I was chairing SLA's Professional Development Committee to whom the implementation of this charge was entrusted.

It happened that, at that moment, the American Library Association, long the body responsible for accreditation of library school programs, was embarking on a study of accreditation backed by a grant from the U.S. Department of Education.

SLA was among the associations invited to take part in this study, which has now been completed and will probably lead to closer involvement in the accreditation process by SLA. This seemed to take care of that side of Priority E. Involvement in curriculum development interested the Professional Development Committee, but it was not entirely clear as to how it should begin. What do special librarians, members of SLA, want in the curriculum of library schools? I applied to the SLA Board for a research grant to investigate this, and in October 1984 the grant was approved.

Background

Most literature on education for special librarians provides general rather than

specific information. In the past few years, there have been many articles on the deficiencies of graduate library education and the need to upgrade it, move it into the computer age, abandon or strengthen the accreditation process, graduate fewer students, change the orientation of the curriculum, and so forth. As previously mentioned, most of these articles deal with library education in general, not specifically with that of special librarians. The King report (1) covers special libraries, but the questionnaire was structured in such a way as to be extremely difficult to answer by special librarians with a small staff, since King assumed that the staff consisted of a large number of both professional and support individuals with clearly defined duties.

Indeed, most studies do not seem to have much bearing on the situation of the small special library that we understand to be the norm. Perhaps most useful is Michael Koenig's article "Education for Special Librarianship" in the April 1983 issue of *Special Libraries*. (2) Koenig conducted a survey among the information staff of 28 major firms covering some 500 to 600 information workers. This implies an average of 17 to 21 persons per library—not your typical special library. He found respondents to have rated certain courses they had taken as important or very important: online searching, 83%; specialized reference, 76%; general reference, 69%; programming, 56%; and management/administration, 55%. Respondents with M.L.S. degrees wished they had taken such courses as programming (45%), online searching (37%), computer science (30%), and management (22%). Not all respondents had the M.L.S. degree. Those without tended to wish they had taken such courses as abstracting/indexing and reference.

In a study of librarians working in information-related positions outside the conventional library setting, Betty-Carol Sellen and Susan J. Vaughn (3) looked at educational background. They found that 70.67% would advise such individuals to get a library degree. "Positive responses in the comments section noted

the information skills and management skills of librarians, the valuable theoretical foundation obtained in education for librarianship, and skills in organizing information." (p. 110)

In a valuable study published in *The Library Quarterly*, Herbert S. White and Marion Paris examined "Employer Preferences and the Library Education Curriculum." (4) Among other types of libraries, they reported on 56 large (8 or more professional staff) and 52 medium (3 to 7 professional staff) special libraries. Managers responsible for hiring new graduates were asked "to react to a list of [87] specific courses presently offered at the master's level and to indicate how important these courses are as a prerequisite for anyone they would consider hiring for any entry-level position, or for anyone they would consider hiring for certain specific beginning positions." (p. 4) White and Paris found that "special libraries are indeed special" in that their managers recommended fewer courses than did those in the academic and public libraries surveyed, and no clear curriculum track could be identified. The courses identified as important for large special libraries were "Basic reference," "Advanced reference," "General online searching," "System-specific online searching," "Advanced cataloguing and classification," and "Cataloguing of non-book materials." For medium special libraries, suggested courses were "Basic reference," "Advanced reference," "Collection development," "Literature of science and technology," "Database selection," "Special libraries," "Introduction to information science," "General online searching," "Organization of materials—Dewey," "Advanced cataloguing and classification," and "General technical services." (p. 8-9) Like the Koenig article, this paper identifies some valued courses and competencies, but is confined to special libraries with three or more professionals, a situation that the authors acknowledge to be atypical.

The Questionnaire

The Professional Development Com-

mittee encouraged me to try to identify whether or not special librarians did indeed have any consensus of opinion to offer on the subject of the library school curriculum. My SLA grant permitted me to send a questionnaire to all SLA members who had held office in the Association at any level—Association, Chapter, or Division—over the past three years.

Preparation of the questionnaire was not easy. Various articles decried listing competencies and asking if they were useful. However, at the same time, our faculty, under the leadership of a consultant from Bell Canada, was struggling with curriculum revision. Using as a guide a publication entitled "Stating Objectives for Classroom Instruction," by Norman Gronlund, (5) we began breaking down our curriculum into small pieces. What we were looking for were outcomes. What must our graduates be able to do? and at what level?

The equation LR (Learning Requirements) = CP (Competency Performance) – ER (Entry Repertoire) was used by Gronlund to assist in curriculum development. In other words, our curriculum would be based on our objectives for competencies less the entry requirements we would identify as essential for admission.

Gronlund used Bloom's taxonomy of educational objectives to define the level of outcomes or competencies. At the lowest level one must have knowledge; at the top level one can evaluate. But before you can evaluate you must be able to synthesize; before you can synthesize you must be able to analyze; before you can analyze you must be able to apply; before you can apply you must be able to comprehend; before you can comprehend you must be able to know.

Our first thought was that of course our students would be able to evaluate—but gradually we came to realize that what we are really looking for in new information professionals is an ability to know, understand, and apply. Higher levels may come later; but, except for a very few items, knowing and doing are the competencies we hope for.

I based the questionnaire, therefore,

largely on "ability" and "knowledge" and began by asking respondents to identify the type of library, the number of employees, the education of employees, and the subject specialty of the library.

Questions were asked as to the importance (essential, very useful, useful, unimportant) of various elements in the knowledge of the new graduate: languages, computer languages, typing, and ability to use audiovisual equipment. General information skills were grouped into sections: The organization of materials section included cataloguing with AACR II or other methods, indexing, abstracting, use of subject heading lists, use of thesauri, and ability to develop such tools. Reference skills included knowledge of sources, ability to search online, ability to prepare a search strategy, and knowledge of various types of materials—maps, records, films, and technical reports. Questions were asked about selecting, evaluating, and using circulation and acquisition systems. Computer knowledge included ability to use and evaluate computers—mainframes, minis, micros—and the use of software. Communications skills included ability to write, speak, conduct a reference interview or a user survey. Management skills included planning, budgeting, motivating, staffing, controlling, interviewing, and handling public relations. The ability to state a problem, analyze situations, and make decisions was included. Questions asked about professional skills and knowledge included such issues as ethics, history, freedom of information, and privacy. Finally I asked whether special libraries thought it more important that new graduates be competent in management or in information skills, and I asked respondents to list the five most important qualities, as they saw them.

The questionnaire was tested on a random sample of members of SLA from the Eastern Canada/Section de l'est du Canada Chapter. In revised form, it was then sent out to 852 members of SLA; 495 were returned (58%), but only 472 were usable (55.4%).

Of the 472 librarians responding, 16.9% worked in libraries with 1 full- or

part-time person, 31.1% with 2 or fewer, 39.3% with 3 or fewer, 54.3% with 5 or fewer, and 71.7% with 10 or fewer persons. In 15.3% of the libraries involved, no one had a degree in library and/or information work, in 25.3% there was one person with such a degree, 16.6% had two, 10.2% had three. This means that in over two-thirds of the libraries there were three or fewer professional librarians. Also, 66.2% respondents had no other master's degree; 20.3% had one.

What Was Important in New Graduates?

Perhaps the most interesting response for me was that in answer to the final question "Do you consider management knowledge and skills to be more important than information knowledge and skills?" A total of 52.5% of the respondents said they considered them equal. Another 36.9% thought information was more important; while 8.1% felt management was more important.

Respondents were asked to rate abilities and skills as essential, very useful, useful, and unimportant. In analyzing the responses, I decided to group together the essential and very useful categories to describe most accurately the categories considered important by the respondents.

Since we hear so often that information professionals need two masters' degrees to work adequately in subject specialties, I asked about the need for subject doctorates, masters', and bachelors' degrees. Responses were as follows: 3.4% thought the doctorate was essential or very useful; 74% thought it was unimportant; 42% thought the master's degree essential or very useful; 60.9% felt that the bachelor's degree was essential; and 74% thought experience was necessary.

Should special librarians have a knowledge of languages other than English? Apparently it is not a priority; although, 17.9% opted for French, 17.2% for German, 9.5% for Russian, and 11% for other languages. What about computer languages? Although 17.9% want BASIC, the others rated under 10%.

The need for typing and keyboard skills has once again excelled in importance. A total of 73.5% considered typing important. Only 33.2% were interested in ability to use audiovisual equipment.

The Top Ten

What knowledge and skills had the highest rating? The top ten based on "essential" and "very useful" replies are shown in Table 1. Unquestionably, communication skills and reference skills

Table 1. Knowledge or Skills Rated as Essential or Very Useful

Knowledge or Skills	Percentage
Ability to communicate orally	98.1
Knowledge of basic reference sources	95.3
Ability to conduct a reference interview	94.9
Ability to develop a search strategy	94.9
Ability to write well	94.0
Ability to communicate with staff	92.5
Have an attitude of service	92.3
Ability to make decisions	90.2
Knowledge of subject sources particular to your library	89.3
Ability to state a problem	89.3

rank very high on the scale of the new graduate's needs.

Other Responses

The questionnaire was grouped into general categories. Cataloguing and classification and traditional subject work generally fell in the middle range of importance. Responses indicated that 58.6% considered knowledge of AACR II important, 62.0% selected the L.C. classification, 30.7% chose Dewey, and 35.5% opted for the ability to devise a scheme. Analysis of documents and use of subject heading lists and thesauri were in the high 80%, but constructing lists and thesauri, indexing, knowledge of vocabulary control were in the 60% range, and only 51.5% thought abstracting was important. Although 88.2% opted for knowledge of information retrieval systems, only 46.2% required ability to create databases and only 58.1% required the ability to use cataloguing utilities.

Knowledge of reference sources was at the top of the list in importance. Particular subjects such as business or arts reflected the interests of the different respondents. A total of 74.8% emphasized the ability to evaluate reference books. Knowledge of special forms, such as maps, films, or patents, rated very low with the exception of microforms, (51.7%) and technical reports (57.2%). U.S. government documents were considered important by 80%, but Canadian government documents were considered important only by Canadian respondents.

Online searching, as suspected, was important to 85.6%, and evaluation of machine readable data files to 74.8%, but a knowledge of the production of books, serials, databases, and audiovisual materials rated very low.

The areas of selection and acquisition were of moderate interest—in the 70% range. Circulation systems and policies were judged rather less important, and conservation and preservation were judged unimportant by more than 45%.

Knowledge of computer capabilities was rated important by 81.7%, but only 20.2% required ability to evaluate main-frame computers, 37.4% to evaluate minicomputers, and 61.1% to evaluate microcomputers. As for use of microcomputer software, 59.5% rated highly word processing; 60.1%, database management; and 37.0%, spread sheets.

On the other hand, human interface skills were rated highly. Ability to write well, communicate orally, speak in public, and work effectively in committees were all over 80%. The reference interview, the search strategy, the promotion of the special library, and instructing in the use of the library also rated over 80%.

In spite of the overall high rating given to management skills, the importance of individual skills was less clearly marked. Organizing work, scheduling, and evaluating progress—all over 80%—overshadowed planning, preparing user studies, and delegating. Problem solving and decision making rated highly, but financial management was not seen as very important: identifying costs, 63.4%; developing a budget, 56.0%; controlling expenditures, 66.2%; and accounting, 67.1%. Space planning and furnishing were also judged of little importance.

Human resource management skills were judged moderately important on the whole: interviewing, 65.5%; selection of employees, 57.3%; training subordinates, 75.8%; motivating, 78.3%; performance appraisal, 71.8%; but employment laws, labor relations, and union-management interface were in the twenties or below. Only communicating with staff (92.5%) was in the highest category.

Research skills—stating a problem, collecting, analyzing, and interpreting data—were highly regarded (81.9% to 89.3%) but knowledge of statistics was not (33.7% to 37.8%).

Professional ethics rated 83.1% and an attitude of service, 92.3%, but history of libraries rated only 24.8%. The place of libraries and information in society was in the 40% to 60% range, and issues such as copyright (73.7%), freedom of information (60.6%), intellectual freedom (52.6%), and privacy (57.7%) were on the

low side. Knowledge of library literature was rated 65.7% and of library associations, 74.9%.

Comments by Respondents

A most interesting aspect was the fact that many people wrote letters adding their comments. I analyzed forty letters and was able to identify concerns that came up again and again.

First, many people commented on the fact that the type of person is more important than the skills and knowledge that individual learns in school. This is reflected in the answers to the questionnaire, particularly, for example, in looking at the "top ten" items. These respondents call for people who are able to work with others—the public as well as staff—and who exhibit an outgoing personality, flexibility, curiosity, and the attitude of service. "Emotional maturity . . . practical intelligence . . . communication skills . . . motivation/dedication" was the way one person put it. Another said, "Send me an energetic, willing, outgoing (not mousy), and PRACTICAL information graduate." Others commented on the need for a commitment to excellence. Respondents urged schools to be more careful in screening students for admission.

Secondly, a number of people talked about teaching "the basics." Library skills such as how to select, acquire, organize, retrieve, and disseminate information were called for, and some people added management and computer skills. Since each job is different, it is not possible for a graduate to be fully prepared for everything, but if they have the "basics," they can work from there. One person said, "For a new graduate in the library field I would emphasize library skills and knowledge; but, to grow, the management/communication skills are essential."

Many stressed the importance of learning concepts and knowledge rather than skills, and others suggested more emphasis on the new technology and the

ability to understand and use it. Still others emphasized the need for subject specialization in the fields of interest to the library.

A fairly large group saw an internship/practicum as an essential part of the education of the special librarian either as a requirement or as an option for those with no working experience in information work. This might be achieved through part-time work or summer jobs for those in two-year programs. Library schools should set standards for this, and SLA might make recommendations along these lines.

A number of people commented on the need for students to be aware of the "real world" and to be able to deal with upper management on its own terms. One person suggested that the graduate needs "an ability to understand the organization for which one works and the role of information in that organization," as well as be a "constant communicator with key people in the organization and know how to sell professional librarianship skills in terms upper management and users understand."

Lastly, many suggested that there is no way the new graduate can be completely ready for the job. The graduate will have much to learn on the job, and will always need to take advantage of opportunities for continuing education in order to grow, keep up to date, and be effective.

What Emerges from All This?

In looking at the data from the survey, we can draw a few conclusions, though very few surprise us. It is interesting that so few respondents thought it important for special librarians to have doctorates or even masters' degrees in their subjects, but not surprising that a bachelor's degree and experience are highly rated.

It is interesting that the communications skills are considered so important. Speaking, writing, communicating to staff, and conducting reference interviews came at the very top of the list. These have long had lip service in pre-

vious library education literature, but in my reading I have not found them stressed so strongly.

I was not surprised that management skills were considered so important by special librarians. I was surprised, however, that planning and finance, including budgeting, were not more highly rated. Those who have been struggling to emphasize research skills will have their ideas reinforced by the high rating given to the research method.

The "basics," especially those related to providing information service—organization of materials, knowledge of sources, ability to interview a client, ability to retrieve pertinent information, and ability to use different technologies—were rated highly. It may be surprising that knowledge of production rated so low, and that, in these days of emphasis on conservation and preservation, very few people saw a need for these. "This is a *special* library," wrote one person scathingly. But not all special libraries deal only with current materials.

It is encouraging that professional ethics and an attitude of service are considered of top importance by so many people, but surprising that so few would emphasize the ethical issues of copyright, freedom of information, and privacy.

Can the Schools Respond?

Will this information be of use to educators or to special librarians involved in accreditation or curriculum development? Can management, communication skills, an attitude of service, a dynamic, flexible personality be taught in library schools? Let me make two points.

First, if schools are to admit people of the caliber that SLA members are asking for, SLA members will have to help. How often do you encourage the dynamic young people you know to enter the information profession and enroll in library school? The schools can only admit the people who apply. Recruitment is a responsibility of the profession as well as of the schools. Special librarians are role

models. Are you the model who can attract the right people?

Secondly, several articles recently have urged more collaboration between practitioners and librarians, especially special librarians in education. Herbert S. White, in many articles, but notably in an article in *American Libraries* (6), September 1983, pleads for dialogue and discussion on an ongoing basis between educators and practitioners. M. Evalyn Clough and Thomas J. Galvin, in "Educating Special Librarians: Toward a Meaningful Practitioner-Educator Dialogue," (7) emphasize the increasing importance of special libraries as employers of library school graduates and suggest that good dialogue between educators and practitioners is essential. This may include special librarians offering field experience to students, visits by educators to special libraries, consultancies by faculty, adjunct teaching by special librarians, and consultation by faculty with special librarians on curriculum design.

If SLA is to be involved in graduate education, this kind of ongoing discussion is essential, so that both groups can understand and communicate with each other and improve both the quality and the preparation of new graduates for the profession.

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Miriam Tees is an associate professor at the Graduate School of Library and Information Studies at McGill University in Montreal, Quebec.

Developments in Special Library Education: Implications for the Present and Future

Edwin M. Cortez

■ A history of education for special librarianship is presented within the overall development of library education. The 70 years of progress in special librarianship has had little impact on the traditional methods and philosophy of library education in general. Attention is given to the integration of the principles of information resources management with special librarianship in order to present a model that is adaptable for future library education.

The sum and substance of 70 years of progress in special librarianship have had little or no impact on the direction of library science education in this country. More than half a century of casual attention or just plain disregard from the library schools has inhibited the special library movement from having its vision put into reality when it comes to educating librarians. After an early history of growth, library education entered into an unhealthy period of stagnation resulting in an inability to meet the educational challenges of an information world economy.

Growth and Stagnation

Melvil Dewey, in designing an academic program in "library economy," set library education in a direction with universality in training students "to select, buy, arrange, catalog, index, and admin-

ister in the best and most economical way any collection of books, pamphlets, or serials." This was a period of growth for library education that continued through 1) the identification and implementation of a generalized core curriculum in the 1930s and 1940s; 2) the development of the master's program in the early 1950s; 3) the growth in number of Ph.D. programs in the late 1950s and throughout the 1960s; and 4) the increase in number of library schools during the late 1960s and early 1970s. During this growth period the methods of instruction and course delivery became streamlined so as to offer the program of library instruction in the space of one year; capital investments were made in technology and new, more up-to-date images were shaped around school name changes and non-threatening innovations, such as the development of undergraduate, joint degree, and advance certificate programs.

Outwardly library education was advancing; however, in reality it was building a wall around itself and entering into stagnation. When any group or organization enters a period of stagnation, changes in both attitudes and methods tend to be incremental. Bureaucracy sets in, infrastructures are shaped, and people find their route to advancement by manipulating the system, not by improving it.

With no deviation from the principles of Dewey's "library economy," library schools went on teaching library techniques at the shop level, more or less preparing students to enter a labor intensive economy, with little regard being given to the rapidly approaching knowledge-intensive economy. Many of the same schools would sacrifice flexibility to avoid disruption brought about by change. Core curriculums continued to occupy roughly one third of the year's academic program and rarely included anything outside of cataloging, book selection, and reference. Instruction continued to be by major type of library: public, academic, school, and—for image sake—sometimes a course in special librarianship. (1,2)

For a time such strategies seemed to work. Library education was meeting the needs of an employment market where librarians could go to work in schools, colleges, universities, public libraries, and in a wide assortment of information centers in both the public and private sector. Reputation for quality fell much more slowly than quality itself. Brand loyalties persisted and accreditation gave its stamp of approval.

The various library schools, but particularly the older "smokestack" ones, began to discover that they had a large investment in the status quo. As a result they were, in general, reluctant to make major innovative changes in methods or philosophy, and they looked to the future in terms of the past.

The Entrepreneurs

With stagnation having firmly embedded itself, the library schools resisted op-

portunities to develop fresh ideas concerning curriculum design and program objectives. Entrepreneurial risk taking was suppressed because it was perceived as a threat to the status quo. This is no more clearly evident than with the special library movement and the tenacity with which library education has resisted learning from its innovations, traditions, and accomplishments.

Throughout a somewhat tumultuous history, there has been a particular philosophy that remains constant with special librarianship. This philosophy is best reflected through the Special Library Association's motto "putting knowledge to work," first coined in 1916 by Dr. John A. Lapp, editor of *Special Libraries*. This same philosophy is at the root of what today is called information resources management (IRM). IRM is seen as a dynamic process of managing discrete pieces of information for the purpose of helping individuals and/or organizations meet their mission. IRM views information as an organizational resource with intrinsic value. An early and firm foundation in IRM has characterized the development of special librarianship for over 50 years. It has given the special library group a professional identity which has distinguished it from other types of library groups. It is the belief of this author that librarians in general can benefit by adopting this approach to information service, and by familiarizing themselves with the history of the special library movement and of the principles of IRM. If this were to happen, new implications for library science education would emerge. These implications would include the deliberate effort by library schools to sharpen the awareness in students that they are entering a highly specialized profession where its members hold a unique expertise in managing information for personal, corporate, and national use.

It is not possible within the limitations of space and the reader's forbearance to give but a snapshot picture of the history of special librarianship. For this reason and for the sake of balance the history that follows is segmented into three eras:

early, middle, and modern. Description of each of these three eras will focus on education issues and the emerging philosophy concerning the role of the special librarian as an information resources manager.

The Early Period

The Special Libraries Association was formed in 1909 by John Cotton Dana and a band of followers who split off from the American Library Association (ALA) in the belief that the ALA was not fully responsive to the information needs of the specialist. At the time of his death, the New York Herald Tribune was to venerate Dana as the "liberator" of knowledge.

He hurled no ultimatum at the state
Nor led a revolution out to cry
An empty creed against the empty sky.
Nor ever did he play upon the hate
Of poor for rich, or ignorant for great.
And since his slow revolt was fine and high
For him no banners dip along the sky,
No cannons roar, no millions venerate.

His deed was not a sudden, blaring thing;
It was a lifework, patient, unacclaimed.
And now before the searching mind of
youth
The serried thinkers of the ages fling
Their gold. This man made knowledge
free, unchained;
He loosed the slow invading tide of
truth. (3)

In contradiction to the teaching of the principles of "library economy," the 1911 SLA conference resulted in the following announcement:

It might be desirable to place in charge of a special library, one who has no library training but who has extensive training in the problems and the scientific literature of the special library or business served and who has an aptitude for the reorganization of information, and who therefore may be relied upon to learn and apply the necessary library methods. (4)

It is not altogether surprising that the established library schools looked upon this kind of thinking as controversial but

unthreatening since SLA was not all that significant in those early years of development. In retrospect it is clear that the emerging philosophy of the special library group was one which emphasized the importance of subject knowledge over library techniques. While some argued, however, that knowledge of subject specialty areas was the principal necessary qualification of the special librarian, others argued that a different type of knowledge was paramount: knowledge of how to put information to work in order to help individuals or organizations achieve their goals regardless of the environment in which information services were being provided.

The first formal attempt in special library education to fly in the face of Dewey's principles of the "library economy" and of the orientation of library schools to teach at the generalist level was a four-week course in "The Business Library" offered in 1919 by the Library Service School at Riverside, California. However, it was the course offered at Columbia University in 1926 to 1927 by Linda Morley that is more traditionally cited as the present-day prototype for special librarianship in library schools. It is also in this course that we see the first strong association with the principles of information resources management. Morley writes:

the special librarian in the private corporation, association or governmental organization does not have the clear cut subject limitation of the special department of a public or academic library. The former is the information center for the organization with which it is affiliated and must supply any information needed by individuals in carrying on the day's work. Probably no one who has not worked in such a library has any conception of the variety of subjects on which information is needed by any working group. (5)

Morley goes on to say, "...special libraries are organized on a functional or operating basis determined by the activities of the organization and the resulting information needs." (6)

In order to know what to teach, Morley made a study of a variety of special li-

braries and attempted to discover the common denominators for special libraries as a group. What she found was that knowledge of the organization, what it did, and how it operated were of highest importance, followed by knowledge of how information could best be put to work in order to achieve a specific goal or objective of that organization. (7)

Still, the tendency of library schools was to interpret the suggestions of the Special Libraries Association for special library education as education in subject specializations. Josephine A. Rathbone presented what was probably the view of most library schools at the time. "Each special library is a special problem involving special knowledge of a special subject"; and though she might have admitted that special librarianship appeared to be growing in demand, she felt that the market was still too small to justify an extensive program requiring subject specialized education. (8)

In the meantime, the basic program in "library economy" would have to continue to do what it could to prepare the special librarian. After all Dewey's curriculum, as most library science faculties believed, was essential for any kind of library practice, and the needs of the special librarian were no exception. This determination to recognize "library economy" as a professional unity in library education in effect was depriving library education of much of the intellectual content that it might have gained by integrating more of what the experience of special librarianship had to share. This experience pointed to the view that librarianship was interdependent with other disciplines and that the "essential unity of librarianship" had more to do with "putting knowledge to work" rather than "putting knowledge on the shelf." (9)

The Middle Period

In 1926 the library educators were still reeling from the rather serious indictment delivered to them by Charles C. Williamson in his now famous report:

A large amount of practical work in a general professional course of one year is open to serious questions on several counts. The primary purpose of the school is to lay a broad basis for skill in some type of professional work, not to develop that skill and certainly not to impart skill in the routine processes which belong to the clerical grades of library service. The latter is a very important consideration. It is the function of the training class to give the student skill in the performance of the duties of some particular position in a particular library. . . . The large part which the practical work has hitherto played in the professional course is additional evidence that no clear distinction has yet been made between professional training and clerical training. (10)

It is clear that Williamson was talking about a need for library education to lift itself up from its shop-level methods of instruction. In 1927 with Williamson as dean, Columbia University's library school launched the first master's degree program in librarianship with plans for a sequence of study dealing directly with the problems of special librarianship. However, by 1934 Ernest J. Reece of Columbia University was reporting failure of the program as evidenced by the fact that not a single student had taken interest in pursuing a master's degree in special librarianship. The reported failure at Columbia undoubtedly gave the library directors of other schools the confidence to hold to the status quo and continue their programs in isolation from the new ideas being developed by special librarianship. Ironically it was Reece himself who best articulated the central theme of this new approach ". . . if the librarian is to be more than a caretaker and purveyor, he must assemble material which he cannot know, uncover data he cannot recognize, and organize facts he cannot interpret. . . ." (11)

Indifference on the part of most library schools to the needs of special librarians was certainly not due to any absence of pressure from the special librarians themselves. As one strategy, the special librarians attempted to educate the educators by instructing them on the na-

ture of special library work. "In a special library," one individual wrote:

the material of the most vital importance is not in books—often not in print; information is already gleaned, made up and concentrated into portable parcels, by the librarian, and is already to be delivered to the special worker too busy to investigate for himself; one finds a clearing house of live ideas on live problems, many of the ideas being still in a formative stage; one finds a utilitarian establishment calculated to serve the worker too busy to take time for scholarly investigation. Often such scholarly attainments as are involved in the investigational work must be furnished by the librarian. The special librarian becomes in fact a bureau of investigation. . . . (12)

At about the same time, the SLA continued its efforts to influence library education using a different strategy. Under the chairship of Rebecca B. Rankin, SLA appointed a Committee on Training whose charge was to identify the educational needs of special librarians and to propose specific topics of study that would address these needs. There were 18 topics in all which included theory, business, economics, statistics, applied psychology, typing, editing, special bibliographies, principles of classification, subject indexing, filing, information sources, research, public relations, acquisitions, and administration of special libraries. The committee delivered their recommendations to Williamson at Columbia for implementation. Faced, however, with the response that the likelihood of putting such an ambitious program into operation was unrealistic, the committee compromised on Linda Morley's course. For the next few years, the committee continued to work with Ms. Morley's course while at the same time drafting a set of "minimum standards" for special library education. These standards, together with other aspects of the committee's work served as the basis of several short courses given by local SLA chapters designed to meet the needs of special librarians.

Slowly the accredited library schools began to offer a single course in special librarianship, but a deficiency still rested

on the fact that these courses were isolated from other courses in the school as though the principles of information resources management were irrelevant to other aspects of the curriculum. (13)

In 1948 a conference was held at Princeton, New Jersey, which was sponsored by the Council of National Library Associations and the Carnegie Corporation of New York. The purpose of the meeting was to enable faculty representatives and practicing librarians to consider six major issues in library education, among which "specialistic" education was given an important place. The Princeton Conference was dominated by a highly vocal conservative group who believed that library schools were already doing as much as they should with regards to the needs of special librarianship.

Nevertheless, there were areas of agreement that can be noted: 1) specialized subject bibliography was being neglected; 2) the number of specialized courses demanded by special librarians was unrealistic; and 3) workshops, short courses, and similar activities could have value, but were dangerously limited in their effectiveness and should be carefully planned with only highly restricted objectives. (14)

To its credit, perhaps the most important result of the conference was the attempt to help library education break out of stagnation by recommending:

... that if and when a joint committee on education for librarianship is appointed, a thorough survey be made by the committee to determine the most desirable educational preparation for special librarians, to serve as a guide to library schools in developing programs of training. (15)

The Joint Committee on Library Education, of which 5 of the 12 members were special librarians, identified 10 areas of special librarianship for which library schools should be responsive. These areas included finance, law, science and technology, medical, theater, journalism, geography (map), art and architecture, and theology. By singling out specific subject areas and thereby giving vent to the vast

differences of opinion as to the amount and kinds of special library courses required, the Joint Committee on Library Education only managed to give further proof to Wyer's dictum that the librarian of each variety of special library "thinks that training for his type of work should be different from the training of every other type." (16)

In the end, the Committee's action added to the confusion as to what it was that the special library group was seeking. Was it specialized knowledge of subject areas or specialized knowledge of information handling?

The Modern Period

The period after WWII and the development of the first stage of modern technology during the 1940s and 1950s brought about several important internal and external reviews of library curriculums. Many of the old bibliographic solutions and library techniques were found to be ineffectual in dealing with a new form of literature, the technical report. The ephemeral nature of the technical report altered almost all aspects of what hitherto were considered universal bibliographic laws. This new media had to be acquired, classified, arranged, and disseminated in ways different from the traditional methods. The ability to get a handle on this new information container came more easily to the special librarians since they had for so long instructed themselves in the processing, control, and dissemination of elusive information.

It is no surprise, therefore, that when the information center concept was created to store and make available this and other new forms of literature, staffing naturally fell to the special librarian. Many years before, perhaps planning in anticipation of need, the special librarians had addressed the administrative and technical aspects of running this type of "special library." In 1938 *Special Libraries* published an article that reported the activities and problems common to many special libraries but with inadequate library school attention. The article in-

cluded the following: problems of organizing, administering, staffing, and budgeting for a small library in which salary and operating expenses were budgeted from the same treasury as those of the library's clientele; techniques for the discovery and selection of ephemeral material, including pamphlets, surveys and research reports, non-commercial publications, photostats, etc.; methods for determining types of catalog and cataloging procedures adapted to the organization and coordinated to the information needs of the groups served; methods for solving problems involving cataloging non-book material frequently issued without title page or obvious author, title, or imprint information; techniques of evaluating classification schemes or vocabulary lists to prove the adequacy or inadequacy for various forms of media and subject content; techniques for organizing special files or groups of materials, including methods of filing; methods of information gathering, beyond the traditional reference techniques, which include methods of discovering organizations and individuals who were authorities in special fields; etc. (17)

During the early 1950s, the massive growth of scientific and technical literature, and the need to store and retrieve this literature rapidly, resulted in new ways of indexing and abstracting documentation. One of the first groups to recognize the utility and make use of these methods for small, specialized document collections was the special librarians.

As business and industry turned to technology in the 1950s and 1960s, the special librarians were expected, like all other staff, to make effective use of this new resource. While there may have been initial resistance in learning the application of the modern technologies, it is safe to say that knowledge and use of them came early to special librarians as compared to their colleagues in other fields of library practice. (18)

When library schools began to instruct students in the application of information technology during the 1970s, it is unclear as to how much of the special library experience with technology was

considered in defining the objectives of this new area of instruction. The accusation, however, is that many "Atari" academics on library school faculties, without benefit of consultation with practitioners, or a clear vision, began to throw technology at the curriculum only to have it bounce around before finally settling into the information science component of the instructional programs, where in many schools it remains today in isolation from the rest of the curriculum.

The 1980s have introduced a number of challenges for the library profession in general, with certain specific implications for the special librarian. If stagnation of library education continues throughout this decade, we can expect fewer and fewer bright, dynamic, and inventive individuals to be attracted to our profession. Why should a creative and ambitious young person want to enter a profession whose prestige is not only in question but where the lack of proper financial remuneration only reinforces its poor status? It is time for the library profession to take dramatic countermeasures because the word is out: the information profession is falling into the hands of a different group of people, who have little regard for library education and who call themselves information managers by virtue of their MBA degrees.

The special librarians face an additional challenge: they must succeed as the high-wire performers of the profession. Because of the environments in which they operate special libraries are not self-evidently good. They must constantly justify themselves to their parent organizations by demonstrating that they contribute more than they cost. This requires individuals who are assertive in articulating what it is they know as information professionals and how this knowledge can be applied in helping individuals and corporations achieve their mission. (19) Also, a different and egalitarian challenge for special librarianship will be to stand as a model for the profession, demonstrating that "putting knowledge to work" is a dynamic, fluid, and

creative process that requires highly developed skills in planning and coordination. The model will be "that of the information counselor and the independent information broker, which combines knowledge of subject areas with that of contemporary information technology." (20)

In general, as an industry that is becoming firmly lodged in the private sector, the information field will need individuals who understand the "business" of information: how it works, how it is marketed, and how it realizes profit. The challenges for all librarians will be fiscal, technological, and political. The librarian of the future must be prepared to assume a new expanded role within society that is dependent on the effective management of information. The techniques of information resources management seem to be the best available tools for new librarians to assume a leadership role in the larger world of information, be it inside or outside a traditional library.

Conclusion

In recent interviews with two prominent special librarians, one an educator and the other a practitioner of long standing, now retired, the historical and modern role of the special librarian was discussed. (21) There was consensus of opinion that the special librarian has always strived "to gear all aspects of the library's operations to achieve the day-to-day goals of its parent institution." There was also agreement between the interviewees on the manner in which this is done. The description—applied to the mission of information resources management by Evelyn Daniel—fits what the interviewees described. "The first mission of information resources management is to integrate the internal information resources—both physical and intellectual—to make them efficient and effective in supporting the work of the organization. The second is to filter the external knowledge base in order to bring in only that which is relevant and useful at the time and place for the pur-

pose of advancing the effectiveness of the work." (22)

As information managers, special librarians have become part of the corporate management team. In addition to dispensing information services to anyone in the organization who needs them—including the company's nurse, lawyer, accountant, or market analyst—special librarians assist top management with strategic decision making. This latter function has made the special librarian indispensable to modern managers and executives who need current, accurate information upon which to base decisions. The growing complexity of organizations coupled with advances in information systems and technology have begun to test the validity of many classical forms of organizational structures and managerial techniques. (23) By providing digestible information, the special librarian has introduced new methods by which management makes observations and, as a result, arrives at decisions. McLeod illustrates:

The manager of a small newsstand of a hotel can manage by observing tangible ingredients himself or herself, his or her merchandise, the cash register, the room and the customer flow. As the scale of operations increases to the size of a firm with several hundred or thousand employees and operations scattered over a wide area, the manager relies less on observation of the physical operation and more on information representing that operation. He or she uses reports that reflect the firm's condition. It is easy to imagine the almost complete reliance that the chairman of the board for General Motors or IBM or Sears must place on information. These executives probably regard their information as their most valuable resource. (24)

There is a tradition in librarianship that segments the profession by type of library: public, academic, school, and special. Library schools perpetuate this tradition by how they have structured their curriculums. After students have completed a common core of courses, they are usually encouraged by their advisors to select an "area" of librarianship in order to structure the remainder of

their academic program. The integrative aspects of the curriculum seem to fade at this point. A subject or type of library approach diminishes the substance of what we claim librarianship to be. This claim suggests that information handling skills are universal, which transcend subject or type of library. The corollary to this claim is that graduates of library schools are qualified to seek employment in any aspect of library or information work. The claim is further supported by the nature of a generic degree that furnishes graduates with the "principles and procedures common to all types of libraries and library practice." (25) In light of what many library schools actually teach, I believe that the aforementioned claim is invalid. One hopes that graduates of accredited library programs have gained sufficient prerequisite skills in the organization, classification, storage, retrieval, and dissemination of information. However, these skills are not practiced in a vacuum. They are practiced in real environments, with real people and live problems. It is not sufficient to teach about the public library. Any public librarian will tell you that no two public libraries are alike. There is a theoretical basis for the study of the environment in which information services are performed. It involves, for example, the use of information audits to determine the framework and flow of information, and how humans interact with information in the context of work or recreation. "We have to understand what our field is fundamentally. It is not librarianship but information. We need to understand the properties of information, how humans process it, and the environments in which it is used. Each professional librarian needs to understand the theoretical base as well as the shared values and philosophic orientation of the field." (26)

There is nothing inevitable about stagnation. Nor does it have anything to do with the personalities, size, or age of our library schools. There remain many lively individuals in our profession with vision, and not all of them fall within the ranks of special librarianship. We must give these individuals the means of resisting

the cannibalism of the profession's stagnant sectors. We must give them an opportunity to put their vision into reality.

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Edwin M. Cortez, Ph.D., is an associate professor of library and information science at The Catholic University of America, Washington, D.C. His principal area of teaching and research is in the management of information systems and technology.

Mixed Signals and Painful Choices: The Education of Special Librarians

Marion Paris
Herbert S. White

■ As part of a comprehensive study of academic, public, and special librarians' opinions and attitudes about library education, heads of 108 special libraries and information centers completed a survey instrument designed to elicit their expectations regarding such issues as the existing library education curriculum, continuing education, and on-the-job training. Little evidence for a unified core special libraries curriculum could be found. On the whole, the special librarians appeared to support continuing education to a greater extent than respondents from either academic or public libraries. On-the-job training, however, was perceived as a luxury that most special librarians could ill afford.

The education and training of librarians have long inspired controversy. A century ago there were undoubtedly those who took exception to Melvil Dewey's prescriptive teaching methods, designed not to create social and intellectual leaders but good workers. By 1923, with the publication of the *Williamson Report*, disagreement over library education had become institutionalized. Now 63 years later, given new demands on the profession and new horizons for it, the debate rages on.

The issue received renewed attention in the 1970s and 1980s in the form of research by Marchant, who sought to determine curriculum preferences first from academic and then from public librarians.

(1,2) An article by Koenig published two years ago in *Special Libraries* aired special librarians' views on the same subject. (3) Most recently, a major study sponsored by the U.S. Department of Education, and contracted to King Research Inc., had as its objective the identification of competencies needed by information professionals now and in the future. (4) A similar effort focused on special librarians has been funded by SLA and is under the direction of special librarian and educator Miriam Tees.

Although those surveys have provided much useful data, we found them wanting for a number of reasons: their failure to take into account the limitations imposed by the length of the one-year mas-

ter's degree as it is currently offered by library schools in the United States, the cost of the degree both to educational institutions and to students, and even the values common to graduate professional education today. Previous studies resulted in what amounted to little more than wish lists, since the respondents expressing an ideal preference needed to take responsibility neither for putting those preferences into practice nor weighing their merits against other course offerings in terms of costs, differing priorities, and time.

As educators as well as special librarians, we recognized that earlier approaches ran the risk of proposing unilateral implementation agendas and of undermining the potential for their success by failing to take into account the implications that, by itself, a "best of all possible worlds" curriculum would inevitably have on other aspects of the master's program. Among those implications were longer (and more expensive) degree programs, removal of portions of the present curriculum, deferral of some instruction to postgraduate continuing education, and reservation of other instruction for on-the-job training. Ours was, as one respondent ruefully noted, a tough questionnaire. Nevertheless, rates of response were uniformly high—one indicator of how seriously librarians regard this issue even if most are uncertain as to what to do about it.

Thus we surveyed directors of academic, public, and special libraries in the United States concerning library school

preparation for the first professional position, the two-year master's program and other options for enriching the curriculum, and continuing education. Respondents and their institutions were distributed as shown in Table 1.

Complete results of the study were reported as "Employer Preferences and the Library Education Curriculum," by Herbert S. White and Marion Paris, in *The Library Quarterly* (55(1): 1-33), January 1985. The purpose of this paper was to review and to analyze the 108 participating special librarians' responses.

Special libraries were identified by means of the classification system of the *American Library Directory*, and two categories were established by size of professional staff: "large," more than eight professionals, and "medium," three to seven professionals. Most special libraries, of course, are not that large; fewer than three professionals—and often only one—would appear to be the norm. We omitted those smallest libraries from our study not, however, because we were unconcerned about them, but because we sought information about what librarians look for in hiring junior professionals. Staff in very small special libraries are typically selected and hired by non-librarian managers—the head of R&D, the vice president for administration, or a personnel manager, for example. We also omitted non-traditional information managers functioning outside the library setting: such persons, while also of great interest to us, were simply too difficult to locate in large numbers.

Table 1.

The Population Respondent Groups		
A	Academic libraries with > 60 professional staff	N=34
B	Academic libraries with 20 to 59 professional staff	N=58
C	Academic libraries with 4 to 19 professional staff	N=50
D	Public libraries with > 60 professional staff	N=34
E	Public libraries with 20 to 59 professional staff	N=49
F	Public libraries with 4 to 19 professional staff	N=49
G	Special libraries with > 8 professional staff	N=56
H	Special libraries with 3 to 7 professional staff	N=52
Total N=382		Rate of response 72.4%

In the most extensive portion of our questionnaire, we sought to ascertain special librarians' views on the curriculum by presenting them with a series of 87 courses commonly included as part of the M.L.S. program. Those ranged from basic reference and other required courses to such electives as bibliometrics, computer programming, research methods, rare books, library history, and trends and issues in librarianship. Respondents were asked to rate each course on an importance scale of our own design, a value of 1 being essential for all new hires and a value of 7 being unimportant. Values 5 and 6 represented "can be learned on the job" and "should be acquired through continuing education," respectively.

We arrived at an overall preference criterion that we termed "recommended courses," or those that respondents gave a median score of 2.5 or less, indicating that over half the respondents deemed the course essential for at least some of their new hires. Those courses are listed in Table 2 and Table 3.

Table 2.

**Recommended Courses
Large Special Libraries (N=56)**

Basic reference
Advanced reference
General online searching
System-specific online searching
Advanced cataloging and classification

Table 3.

**Recommended Courses
Medium Special Libraries (N=52)**

Basic reference
Advanced reference
Collection development
Literature of science and technology
Database selection
Special libraries
Introduction to information science
General online searching
Organization of materials—Dewey
Advanced cataloging and classification
General technical services

What does all of this mean? First, the pattern of preference among respondents from the larger special libraries is diffuse; only six courses had medians of 2.5 or less while the number of courses given a mode of 7, unimportant, was high. Respondents' written comments indicated that subject background was regarded as far more important than anything taught in library school. In fact, we found that the professional staffs listed in the *American Library Directory* for many large special libraries consist primarily of subject specialists whose credentials do not include a library degree at all. That is as true in humanities as in science and technology.

Something quite different would appear to be the norm in the medium-sized special libraries. What we found was a clear preference for training for immediate job competency rather than on education for satisfactory future performance in a competitive environment. The courses selected appear aimed at developing specific, immediately usable skills as opposed to long-term professional orientation. We posited that heads of smaller libraries believe they cannot afford time spent on on-the-job training of new professionals, which in some organizations requires months to accomplish, and many special librarians have confirmed this impression.

While core curricula for both the academic and public library groups were identified and appear in the published study, we were unable to define a core for special libraries: responses were simply too diffuse and aggregates, where evident at all, were too small. The subject specialties of the universe of special libraries are too diverse for a random sample of special librarians to agree on a standardized core curriculum for the preparation of junior professionals.

The timing of our study coincides with SLA's resurgent interest simultaneously in the accreditation process and in the educational preparation of special librarians. Those interests appear to recur about once every generation, as practitioners vent their frustrations on visible and highly vulnerable targets, our library schools. They coincide today with similar

stirrings, not only in organizations like the American Society for Information Science but also in a variety of other professional disciplines, as accreditation standards become increasingly prescriptive.

Not long ago, two accreditation teams were asked during midvisit to leave the major professional schools they had been dispatched to evaluate. While no ALA team has ever been dismissed by a university administration, it has been suggested by more than one library educator—and several vice presidents of large universities—that if the accreditation process becomes too prescriptive, expensive, and intrusive, library schools and their parent universities can well do without it.

Given increasing prescriptiveness, however, what do practitioners desire to prescribe? Will they make profession-wide recommendations? If so, how are the common denominators for such a divergent and diverse area as special librarianship identified? Or rather, will the would-be prescribers assume the familiar, specific, and perhaps narrow vantage points of their own libraries and their own problems?

In addressing the specific concerns of special librarians, our study points to a number of problem areas. The most disturbing of those is of course that there is no consistency or pattern in what individual special librarians say that they desire from the educational process that prepares new professionals. What practicing special librarians appear to want is people to work productively in *their* libraries, immediately taking up the slack and reducing the backlog. A major finding of the study is that when large special libraries hire, they are more concerned about subject expertise than library education. Some members of our original sample, in fact, indicated that they were unable to participate in the study because, although their libraries employed many professionals, few were librarians. Smaller libraries were more pragmatically oriented. A desired concentration on reference, literature of science and technology, and online searching enabled us to

predict with ease what the librarian would be doing. And that has little to do with educational preparation; rather, it relates almost exclusively to vocational training.

At the other end of the spectrum, special librarians—like other librarians—recognize the clerical trap, where clerical tasks take priority over all other work. In the absence of a sufficient number of clerks, professionals assume that function. One special librarian respondent chided library educators for filling students' heads with grandiose ideas of professional work, which then made them less willing to accept and to carry out the mundane clerical tasks that to the respondent characterize much of a special librarian's activity.

There is a difference between education for a profession and training for a job. Accountants, chemists, and engineers fully understand that difference. Individuals hired are professionally prepared, although not trained to work in a specific organization. Training typically occupies from another several months to a year, during part of which time the new hire is not only not fully productive, but he or she may even be unproductive. The extent to which librarians may not understand that fact of life has serious implications for the professional status of the special library. Many special and medical librarians, along with academic librarians, have argued that small staffs do not permit them the luxury of time spent on training. New hires, they insist, must be fully productive at once, and some of those librarians even claim that they are prepared to pay experienced candidates higher starting salaries rather than train new professionals without experience. Those administrators' arguments evade the painful truth that imbalances in staffing are ultimately problems of the administrators' own making, betraying their failure to communicate realistic needs and to achieve strong, adequate management support. That argument also leads at least potentially to a *reductio ad absurdum*: If all candidates must have initial experience in order to get a job, no new graduates will

be able to acquire experience and none will ever be hired.

In the typical one-year M.L.S. program, students take 12 courses or 36 credit hours. At least some of those are required of all students, leaving them free to select perhaps seven more courses out of an array often six times as large. That isn't many courses. Renewed interest has been demonstrated, of course, in increasing the degree requirement beyond one year, but if the responses to that portion of our study are any indication of support for such a plan, it is doubtful that enthusiasm for the two-year program in the United States will turn into a major ground swell.

Nancy Van House has already pointed out that library education programs lose a good portion of bright and assertive candidates because those individuals are also bright enough to recognize that rewards are greater in other fields, and they are assertive enough to seek them. (5) If the length and the expense of the M.L.S. program were increased without a concomitant increase in the rewards for holding the degree, we might very well have stronger programs populated by weaker students. Special librarians cannot solve this problem alone, since most potential special librarians make career decisions during the course of library education, and some even later. If Van House is correct, then the strategy of offering higher starting salaries must be employed across the board, even in the starting salaries of librarians working in the small but very visible public and school libraries, which play a generally unrecognized but nonetheless critical role in recruiting for the profession as a whole. Special libraries hire from a pool of students who have first decided they want to be librarians, and if potential students do not decide to be librarians based on evidence provided by ill-paid professional role models, fewer candidates will present themselves for special library positions.

Another problem area identified by our study concerns what people will learn and when they will learn it, a process which must be assumed—and assured—

throughout the profession to be continuous. We must begin to differentiate among the initial period of education in library school, early on-the-job training, continuing education acquired through experience, and formal continuing education provided by a variety of sources including vendors of products and services. It is only after all of those responsibilities have been differentiated and assigned that satisfactory solutions will be reached. The key word is responsibility—everyone's. Asking employers what they want without asking them at the same time to identify and order their priorities has been tried before with no success, nor will it work any more effectively in the future either. Although as individuals, special librarians clearly articulated their needs and preferences to us, their responses as a group were so widely scattered that no pattern was discernible. Students are confused, and what educators and practitioners are doing does little to help matters. Most students would prefer not to specialize too early. Indeed, many do not even know what a special library is when they enroll at Indiana University, but by graduation some 35 students will have joined the SLA student chapter. Not all of them, however, find initial employment in special libraries, while some who never took the course or joined SLA do.

Why were those latter students hired? How rigid was the search process? What was the employer looking for, particularly if that individual was a personnel director or head of administrative services? Which of the scores of courses available in library school should students take? The students are unsure, and the data provided by our study offer few answers.

Let us not confuse educational preparation with vocational training. Most educators would, we believe, prefer to emphasize the former, but they also feel pressured to respond to forces that give training for specific jobs a higher priority. For educators to attempt to do both, however, is not feasible within the structure of time and cost that constrains us. In order to staff their libraries with capable

professionals and to achieve visibility and respect within their parent organizations, special library administrators must find the time and obtain the resources needed to support postgraduate training programs. Meeting the need will be especially difficult for small special libraries, but larger organizations may be able to lead the way.

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Marion Paris, Ph.D. candidate at the School of Library and Information Science, Indiana University, is an assistant professor at the School of Library Service, University of Alabama in University, Alabama.

Herbert S. White is dean of the School of Library and Information Science at Indiana University in Bloomington, Indiana.

What Corporate Librarians Will Need to Know in the Future

Mary J. Culnan

■ Changes in technology and the external environment will continue to alter the context for corporate library services as dramatically in the future as they have in the past. This changing context also provides new opportunities for the corporate librarian of the future to apply familiar skills. In order to capitalize on these new opportunities, future corporate librarians will need to 1) be trained to take a broader view of traditional skills (reference and cataloging), 2) understand the new technologies, 3) develop basic quantitative skills, and 4) understand the unique role of the corporate library in meeting the information needs of its parent organization versus other types of libraries.

Introduction

The world in which the corporate library functions continues to change and is likely to do so into the foreseeable future. Dramatic changes in technology and general changes in the external environment brought about by energy crises, deregulation, and increased foreign competition, for example, will continue to provide new opportunities for the information professional. In order to serve effectively in this new environment, special librarians of the future will need to develop some new skills.

The underlying premise of this article is that the more things change, the more they stay the same. The fundamental skills that have kept information professionals in good stead in the past will con-

tinue to provide the foundation for the future. The challenge will be to adapt these basic skills to a changing environment.

In this paper, I use the term "corporate library" quite broadly to refer to any special library that serves the day-to-day "business" information needs of its parent organization—whether this organization be private for profit, government, public sector, or not for profit. Generally, these observations are likely to be more relevant for libraries that serve a large organization. In the remainder of the article, I will describe how both technological changes and external events change the corporate information environment and provide new opportunities for the special librarian. The article will conclude with implications for special library education.

Changing Technology

Advances in technology have revolutionized the context for the provision of special library services. Personal computers have moved the organization's computing capability out of the "glass house" environment of the computer center and onto the desks of the users. Advances in communications technology provide for greater interconnection within the organization and for widespread end-user access to external information services through this single device, the PC. The costs of electronic storage continue to decline, while capacity increases. Taken together, these advances continue to change the corporate computing environment from one of centralization to decentralization.

Changing External Environment

External events also continue to have a major impact on the corporation. Foreign and domestic competition have made information a more important resource to organizational decision making. The corporate appetite for information has been fueled by the new technologies, which increase the availability of information. In this new environment, information is viewed as providing a competitive advantage to organizations. Those who don't use information effectively will be the losers. While it is impossible to forecast what external events will emerge in the future, it is certain that these changes will continue to occur and that information will remain a critical resource in responding to these events.

New Roles for Old Skills

Special librarians will continue to bring a special competitive edge to this changing corporate information environment in the form of the traditional skills of cataloging and reference. The changing information environment provides opportunities for applying these familiar skills in new contexts and for perhaps extending the reach of the special library.

Anyone who works in an "automated office" soon finds that without some plan their "electronic file cabinet" becomes unmanageable. Often, responsibility for managing collections of documents created using word processing may fall to the secretary. Without some plan, the likely outcome is a large pile of diskettes, all labeled "Bob's letters." Helping individuals or organizations to develop methodologies for indexing their internal documents is a natural extension of cataloging. In the future, new storage and scanning technologies are likely to increase the demand for trained individuals who can manage large collections of documents and make their contents retrievable in a rapidly changing world.

The end-user computing environment resulting from the proliferation of PC's will continue to provide a second opportunity for the application of traditional library skills. Often, PC's are installed to allow users to develop their own ad hoc computer applications using corporate data and standard application packages, such as a spreadsheet. In order to manage this process, many organizations have created information centers, which are staffed by people who help the users identify what they really need and then develop a customized solution to this one-time need. In reality, the people working in this new type of information center are really serving as reference librarians who provide their service using computer software packages rather than books or online databases.

Curriculum Implications

It is hoped that the above examples provide support for the main thesis of this article—that massive curriculum reform is not the answer to providing the skills needed to effectively serve corporate information needs in the future. Rather, educational programs at all levels should focus on adapting the traditional skills to the new environment brought about by technological and external environmental changes. While courses in business or administration couldn't hurt,

the main focus should be on sharpening the core skills that provide the special librarian with a competitive advantage in providing information services. In my view, this should include courses in four general areas: traditional skills with a broader focus, technology, analytic skills, and the role of information in "business."

Traditional skills with a broader focus. As was stated above, the basic skills of reference and cataloging have applications outside of libraries. Library curricula need to be broadened to include these non-bibliographic applications as well. Training should be provided for indexing and organizing office documents as well as MARC records, and for using numeric and non-bibliographic online databases in addition to the traditional bibliographic databases.

Technology. The computer revolution shows no signs of slowing down. As a result, technology will remain an important component of any educational program. In order to function effectively in the new information center, training should be provided in typical business applications using end-user packages, such as spreadsheets and database management systems.

Analytic skills. The corporate librarian should be able to deal with numeric information as well as text. Reference courses provide the skills for identifying and retrieving the information, while skills in statistics and accounting provide the ability to manipulate, analyze, synthesize, and evaluate non-bibliographic information after it has been retrieved. These quantitative skills are necessary not only for dealing with new types of information requests, but for providing the basis for effective library management through planning, budgeting, and evaluation activities as well.

The role of information in "business." Special libraries exist to serve the ongoing information needs of their parent organizations. As a result, corporate libraries differ dramatically from other types of libraries in that their collections are likely to be more current and highly specialized, and they provide highly customized or personalized services. In order to serve

effectively in this environment, it is essential that the corporate special librarian has a good working knowledge of how information is used by decision makers in corporate settings. While the context and the environment of the corporation will change, these basic information needs and roles are less likely to change. Given this understanding, it is less of a problem then for the corporate librarian to adapt to the changing external environment because the basic organizational needs remain relatively constant by comparison.

The main role of the corporate library has always been to serve as a *boundary spanner* by providing a formal link between the organization and its external environment. By monitoring the external environment and selecting only relevant information, the library helps its clients avoid information overload. (1)

While the changing technological environment and the accompanying rise in end-users making direct access to commercial databases may be viewed as a threat to the viability of the corporate library, in reality this is unlikely to be true. The need for information by corporate decision makers will increase in the future. While a small proportion of individuals who make regular use of a few databases will find it convenient to do their own searching, the majority of users will find it easier to turn to a trained intermediary to navigate the information jungle for them. (2,3)

Conclusion

In conclusion, changes in the context for corporate information services will provide increased opportunities for special librarians to apply the basic tools of the trade. Library education for corporate librarians needs to emphasize the unique information roles found in corporate settings as well as the fact that library skills are too important to be limited only to library applications. The role for continuing education will be to focus on the changes in the context of information use resulting from new technologies and external events.

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Mary J. Culnan is associate professor and director of the Business Management Information Systems Program at the Kogod College of Business Administration, The American University, Washington, D.C.

Changes in Library Education: The Deans Reply

The year 1986 marks 100 years of library education in the United States. To honor this centennial, the Special Libraries Association sent requests to deans of ALA accredited graduate library education programs and asked them, "What do you consider to be the most dramatic changes in library education that have occurred during your professional career?" We include those responses here in this special issue.

The inclusion of interpersonal relations skills in the curricula of a few farsighted library schools is a most significant event in library education. The dramatic impact of technology has overshadowed the significance of interpersonal relations education in librarianship. The widespread use of wordprocessors, electronic mail, and integrated library systems has been a marvel and a joy. Library schools have felt the impact of technology and have responded by including courses about the new technologies in their curricula. But few library schools presently require or even include a course devoted exclusively to interpersonal relations skills. And yet interpersonal relations skills are given a top ranking among the skills wanted by library directors in an entry-level librarian. The incursion of these skills into library education during the last 10 years is a significant event that will continue until it reaches its full fruition, perhaps in the next 10 years.

Nathan M. Smith
*Dean of the School of Library
and Information Sciences
Brigham Young University*

I consider the most dramatic changes that have occurred in library education to be the change of librarianship from a labor-dependent to a technology-dependent profession and the change in library education from being low-unit cost to high-unit cost programs. The latter has produced far reaching consequences, including the demise of a number of library schools.

F. William Summers
*Dean of the School of Library
and Information Studies
Florida State University*

I consider the most significant development in library education, particularly over the last 15 years, to be the institution of specific courses dealing with issues faced in special libraries. Some of these are courses with management orientation, some deal with the specific uses of technology, and still others with subject approaches and user interactions to be found in specific types of libraries. Dual master's degree programs strengthen this approach.

The rate and level of implementation vary considerably from one library school to another, and prospective special librarian employers must advertise and select carefully, certainly from a national pool and not just from an advertisement in the local Sunday paper, if they expect to achieve the benefit of the talent that is available. There is also the need for an understanding that what is being hired is a junior starting-level professional and that employer-provided opportunities for continuing education must be ongoing. There is no doubt in my mind that the quality of potential student graduates for special libraries is better than ever, and their insistence that professionals should do professional work and clerks should do the clerical work is only further proof of that contention.

Herbert S. White
*Dean of the School of Library
and Information Science
Indiana University*

I consider the most dramatic changes in library education that have occurred during my professional life to be as follows: the emphasis on theory as opposed to practice—which has resulted in more attention in the classroom to the “why,” rather than the

"how"—as well as the growing awareness on the part of library educators and students regarding the need for research in the field by library practitioners and library school students. Both of these changes are illustrative of the growing maturity of the profession.

Cosette N. Kies
*Chair of the Department of
Library Science
Northern Illinois University*

When I received my library degree, the MLS had just recently been established as the basic professional degree. There were only 3 schools offering the doctorate—now there are 23. During these past 35 years, there have been great advances in library education. The quality of faculty, students, curricula, and research has improved greatly. The greatest impacts have come from the advent of non-print media and the computer as well as the introduction of information science into the programs of library schools.

George S. Bobinski
*Dean of the School of Information
and Library Studies
State University of New York
at Buffalo*

When I entered the field of education for librarianship, the library was the library school student's laboratory. Now the microcomputer laboratory has replaced the reference collection as the most popular site for completing homework assignments. The book as artifact has seen the substitution of the bibliographical record as surrogate. The book as an information source has found non-print media a fierce competitor.

A major research thrust in our school currently is videodisk technology. When I first became a librarian, my investigations were in the history of printing! The future has replaced the past as the focus of our attention; the present becomes increasingly evanescent.

James D. Ramer
*Dean of the Graduate School
of Library Service
University of Alabama*

In a large sense, librarians have always served the same functions. They have gathered information together, put it into a retrievable form of storage, and provided some form of access to it. The arrival of the "information age" does not change those functions. The tools are simply different. Library school education must adapt to integrate and include the new technologies, but must not lose the focus on service and concepts of information organization that have served us so well in the past. As the term "librarian" is replaced by new terms, such as information manager, library education must hold on to its turf; otherwise, these jobs will be filled by graduates of business or computer science programs. The opportunity is there; it has concomitant risks, but all opportunity does. We are in for some fun.

Robert C. Berring
*Dean of the School of Library
and Information Studies
University of California,
Berkeley*

The gradual changes that introduced intellectual vigor to library education were brought about through upgrading of educational requirements for admission to graduate programs in library and information science. The intellectual stimulation that swept professional education came because of the high quality of teachers invited to join faculties. Not only did younger faculty members bring with their competencies technical know how, but a deep understanding of the role of librarianship in an information-driven society. More recently recognition of the need for linkages with other related fields, e.g., telecommunications, management, and behavioral sciences, has set the scenario for library education for the coming decades.

Miles M. Jackson
*Dean of the Graduate School
of Library Studies
University of Hawaii*

I believe that there has been a lack of dramatic change in library education. I began as a library educator in 1971 and taught seven sections a year of a course entitled "Current Issues in Librarianship." The issues we discussed included the following: How does infor-

mation science relate to librarianship? To other disciplines? Is librarianship a profession? What is the difference between a profession and an occupation? How can you tell the difference between a librarian and a social worker? Between a librarian and a curator? What is a library? How do you know the difference between a library and a YMCA? Between a library and a museum? What is a library's community? What is the difference between information needs studies, user studies, and collection use studies? I need not go on.

We have clearly learned more about these questions. We may have more answers. There has been more systematic research about users and about library systems. We have also obviously changed the ways in which we do our work as an increasing number of systems become automated. But the philosophic questions have not changed. What we are about has not changed. And we continue to debate priorities and policies.

Leigh Estabrook
*Dean of the Graduate School
of Library and Information
Science
University of Illinois*

I entered the profession as a public reference librarian in 1959, later working university and community college reference desks, and became a library school teacher in 1967, teaching since then in three different universities. During that time, I have noted two major developments in library education—the intensification of scholarly rigor in both instruction and research, and the interest expressed both by practicing librarians and library educators in the breadth and depth of preparation needed by beginning professionals.

Evidence of these two developments is quite direct and powerful. The Committee on Accreditation of the American Library Association issued the statement on *Sustained Productive Scholarship* in 1980, which placed that agency in direct support of university standards for all faculty members, recognizing the importance of contributions to the body of knowledge both to the vitality of instruction and furtherance to the profession. Evidence of the interest of practitioners in developing the breadth and depth of preparation is seen in the competencies suggested by the King study, by special librarians and other interest groups, and by the discussion about extended masters' programs. Fortunately, library educators do not

have to operate in a vacuum. Many practitioners and the organizations that represent them have maintained meaningful oversight of the preparation of those entering the profession.

Carl F. Orgren
*Director of the School of
Library and Information
Science
The University of Iowa*

The emergence of a new instructional pattern for schools of library and information science has placed them squarely in the area of the management of information. The introduction of the computer into libraries has been clearly recognized by the library profession in these years, and in recent years instruction in library schools has been broadened beyond traditional libraries to include preparing managers of information in various settings: businesses, corporations, legal offices, state and federal document centers, and other areas. To accommodate these new dimensions, library faculties have changed, and courses of study and requirements for the master's degree have been altered significantly. This has certainly been the experience at the University of Michigan, which introduced in the summer of 1951 one of the first courses in the use of the computer in handling information. Other technological innovations will stimulate continued change, but the tradition of public service should remain.

Robert M. Warner
*Dean of the School of Information
and Library Studies
The University of Michigan*

One of the most dramatic changes that has occurred within library education during my 20 years in the profession is the infusion of technology-related issues and concepts into the curriculum of library education programs. The revolutionary technological advances in our society, coupled with the exponential increase in the volume and forms of information, have had a profound impact on libraries. For example, automated systems are now common. A significant range of information is currently available in multiple formats, including videocassette, optical disk, magnetic tape, and

online. Clearly, these and other developments have had a correlative impact on the content of curriculums in library education programs nationwide.

While the graduate degree program of the School of Library and Informational Science at the University of Missouri-Columbia was the first to require of all its graduate students a basic course in library information systems in 1966, this was the exception and not the norm. The school was fortunate, indeed, to have the pioneering vision of Ralph Parker, Dean Emeritus, who is considered one of the fathers of library automation. Since the late 1960s, however, most graduate programs have created a spectrum of options in an effort to integrate the use of technology in the provision of information services. Additionally, ongoing changes in existing course content have been yet another means of addressing this development.

Mary F. Lenox
*Dean of the School of Library
and Informational Science
University of Missouri-Columbia*

I consider the most dramatic changes in library education that have occurred during my professional life to be the following: the emergence of a broader view of the library / information field, which encompasses information management wherever it takes place and not solely within the confines of libraries; the development of information science as a research area and a disciplinary basis for the profession; the emergence of a true graduate faculty with scholarly interests and a program of research for many schools; and the integration of computer / telecommunications technology into the curriculum and the development of supporting laboratories.

Evelyn H. Daniel
*Dean of the School of Library
Science
The University of North Carolina
at Chapel Hill*

I consider the most dramatic change in library education that has occurred during my professional life to be the introduction of computers into the library world. The library profession was somewhat

slow in adapting to this, but it seems to be coping now and I hope will become the world leader in the information science field. The professional associations—SLA, IFLA, ALA, and others—are exchanging ideas and learning from each other, and will benefit greatly from this.

The library world should become more aggressive in selling its products and should make them so indispensable that everyone would be “scrambling” to get them, regardless of cost. Library schools should work towards international educational programs, recognizing the fact that we are now one world.

Martha Boaz
*Dean Emeritus of the School
of Library Science
University of Southern California*

Many changes have occurred in library education during my professional life: the shift of emphasis from how to why, from techniques to problem solving, from doing to thinking, from accepting to questioning; the acceptance of the legitimacy of research as a component of programs and of on-the-job performance; the emergence of outward-looking approaches to information seeking, with information resources defined in much wider contexts than library collections; and the acceptance and exploitation of the new computer and communication technologies.

Ann H. Schabas
*Dean and Professor at the School
of Library and Information
Science
University of Toronto*

One is, of course, tempted to repeat the litany of automation, networking, and the nascence of research awareness as the most dramatic additions to the content of library education. Another tempting change to identify is the vast growth of the late 1960s and early 1970s followed by the precipitous decline in enrollment in the late 1970s and early 1980s; however, the most dramatic “occurrence” in the field to me is not change, but rather how in the midst of change library education has been able to maintain

the essentials of library practice as the core of its educational program. Central to this core is a focus upon the individual information seeker as the librarian's concern. The service imperative remains the nucleus of education for librarianship.

Jane Robbins-Carter
*Director and Professor at the School
of Library and Information Studies
University of Wisconsin-Madison*

Many changes have occurred in the field of library education during my professional life, or since 1961. The advances in information technology and applications of computers in libraries have had some impact on our field. The new technology forced library educators to change some of their old methods of teaching. It has contributed to some improvement in the image of the profession and has attracted a different, if not better, group of students and faculty. The faculty, to a large extent, are becoming computer literates, their research skills varied, and their classes somewhat more challenging, exciting, and stimulating. Unfortunately, the changes have not been as dramatic as one might have expected. The profession needs more fundamental research by professionals and scholars who are both sufficiently varied and well-grounded to provide new perspectives and to make it possible to discover new principles and relationships in the discipline of information science.

Mohammed M. Aman
*Dean of the School of Library
and Information Science
University of Wisconsin-Milwaukee*

The Scholarship Program: Still a Good Use of SLA Funds?

Muriel Regan

■ The SLA Scholarship Program is reviewed from historical and financial viewpoints, with reference to a previous survey of scholarship winners, and from a cost-benefit viewpoint. In context of the current job market for special librarians, and our profession's image, suggestions are presented for making SLA's investment in the scholarship program more effective.

Prior to the creation of the SLA Scholarship Fund in 1955, there existed a Student Loan Fund, which had been created by the Association in 1938. During the 15 years of the Student Loan Fund's operation, a total of \$2,875 was loaned to eight members from five different chapters. Six of the borrowers, in 1954, were still actively engaged in special library work. In 1955, the Scholarship Fund was established when it was agreed that such a fund would "benefit the Association by encouraging its members to continue their professional education. It would help raise the educational standards for the profession. It would be of advantage in recruiting special librarians from the colleges and universities. . . ." (1) The scholarship program's "prime objective . . . (was) to promote the profession and to help librarians achieve professional status." (2)

Implicit in the above is the notion that a scholarship is an investment in the future, not only by the individual recipient

but by the field of special librarianship as well. It is a reasonable question to ask, however, whether the SLA Scholarship Fund, which as of December 30, 1985, totalled \$152,683, (3) is being "invested" wisely, not in monetary terms but in terms of whether we have seen and will see an improved future in the field of special librarianship, in regard both to professional achievements and career potential.

I have no doubt that in theory scholarships are important to the future of library education, particularly as tuitions for graduate schools increase. We want people with the best potential to be able to afford education. Scholarships indicate a commitment to the future of a profession by its professional associations and reflect concern by SLA members for the importance of education to special librarianship.

Today SLA offers up to two \$6,000 scholarships annually for graduate study leading to a master's degree; up to two \$3,000 stipends for minority students for

graduate study leading to a master's degree; and administers two scholarships of \$1,000 each, funded by other organizations: the ISI Scholarship Program, for beginning doctoral candidates, which is funded by the Institute for Scientific Education, and the Plenum Scholarship Program, funded by the Plenum Publishing Corporation, for graduate students already enrolled in a doctoral program. While the two awards not supported by SLA funds are, strictly speaking, not pertinent to this discussion, it must be assumed that the funding organizations would have much the same interest as SLA in assuring that their investments are well spent. However, the immediate question at hand is whether the money provided by SLA is being utilized to provide a sound return in the future.

There is some indication that it is not. In an article that I co-authored with Vivian D. Hewitt, (4) we summed up the results of a survey we conducted of the 113 SLA scholarship recipients from 1955 through 1978. Of the 113 recipients, 41 could not be located and 22 did not respond to the survey. Two were deceased. We would have to assume that those unable to be located after a thorough search of directories and considerable publicity were simply not in the library field any longer.

It is disturbing not only that so many recipients were not located, but that there was no planned follow-up of the scholarship winners. Consistent follow-up, possibly by prior agreement with award-ees, would have provided information about why so many failed to make use of their SLA-supported training and would give interview committees data helpful in refining guidelines for candidate selection.

Of the grantees who responded to the survey, 81.2% were working in special or other libraries. Only 1% said that they would have become special librarians anyway, although a majority said that they would have attended library school even without scholarship aid.

It seems clear that the scholarships brought people into the field; even more impressive was the number who had

made outstanding contributions: writing articles and books, serving as officers of SLA and other professional organizations, and receiving various awards and honors.

Another matter of concern, however, is that 29.2% of those who responded to the survey never entered the field of special librarianship at all, either because of a lack of job opportunities in their area, or because of changed career goals or better opportunities in other library fields. This suggests the need to advise candidates on the realities of the job market and to explore more carefully the depth of their commitment to special librarianship, as well as the scope of their career planning. In certain specializations, for example, an awareness that willingness to relocate might be necessary in order to obtain a position needs to be part of an individual's career planning. SLA might even take the larger step of helping scholarship winners implement career plans, counseling them in their job search and, when necessary, helping them to relocate by putting them in touch with appropriate chapter officers and other useful contacts.

Further concern about the SLA scholarship program is suggested by the fact that in some years there have been no applicants for some of the awards. More publicity is clearly indicated; this would help to achieve what the Chairperson of the 1983-84 Scholarship Committee saw as necessary: "... additional applicants are needed who have improved educational background, relevant work experience, and a firm commitment to the *profession of special librarianship.*" (5)

Perhaps more to the point are signs of lagging interest in the field of librarianship as a career. A dearth of applicants for academic and public library positions has been noted, (6) the result in part from a cycle of oversupply of librarians leading in turn to fewer students enrolling in library schools followed by a resulting undersupply. This dearth is also caused by limited library career opportunities, in terms of financial rewards and upward mobility, while other job opportunities, for women particularly in less traditional

fields, have been expanding. This situation of scarcity is true also to a somewhat lesser degree in special librarianship, where business, law, and technical special librarians are in short supply. These limitations have also proved troublesome in the continuing attempt to recruit minority librarians, (7) even with such encouragement as SLA minority stipends.

It would seem that the SLA scholarship program has not been entirely successful in meeting the goals cited earlier. The goals themselves still stand as worthy. Promotion of the profession continues to be critical. Professional librarians are sorely in need of enhanced professional status; we will need to attract highly qualified people to the profession. Still, in answer to the basic question of whether SLA's money has been well spent, I would offer a qualified yes: "yes" because the intent of the scholarship program is sound and, to some extent, has been achieved; "qualified" because certain improvements need to be made in order for the scholarship investment to yield an even better return.

Thus far I have touched upon several improvements that might be implemented: more thorough evaluation of the applicant's goals, methodical follow-up, improved job market counseling, helping awardees actually to enter the special library field, and increased publicity about the awards. Here are some other suggestions that might make the granting of scholarships more effective.

Consider, in addition to awards for graduate students, midcareer scholarships for special librarians needing to retool or retrain. Particular attention might be paid to helping special librarians attain skills necessary in our technological age, such as computer expertise, database management, database searching, and so on. Consider using some of the scholarship funds for internships in special libraries, again to improve the skills of practising special librarians, providing hands-on experience with computerized library activities, specialized reference, or expansion of skills to such areas as archives, records management, or infor-

mation management. Both of these suggestions would be useful in maintaining high levels of skills for the profession.

Encourage SLA scholarship winners to be active in SLA chapters and divisions. In the Hewitt-Regan study, we were startled to note that only slightly more than half the winners were active, or even inactive, members of SLA; those missing, of course, were not members. The important link between SLA and those expected to achieve in the field should be cultivated. A mentor system, with much one-to-one communication, might be useful here.

Finally, we must realize that the success of the scholarship program is tied inextricably to the issues of special librarians' career opportunities and salaries. If SLA is going to attract the finest applicants for our scholarships, and retain scholarship awardees in the field of special librarianship, efforts must be made to set realistic minimum acceptable salaries; to educate employers to the full range of possible ways of making use of the skills and talents of special librarians; and to encourage the expansion of job opportunities so that an attractive career ladder is possible for the members of our profession.

Indeed, in the July 1986 issue of *Working Woman*, library science was listed as one of the 10 worst careers for women (and, by implication, for men). The authors noted that "low pay isn't the only problem. Traditional library staffs are being restructured to make way for computers. . . ." There was, in the article, a "silver lining": "These high-tech changes can also pave the way to positions as corporate or legal librarians within information-management departments in large companies." (8) What does this say about the opportunities for the rest of special librarians?

I would therefore urge as a most important step that SLA take action on the larger issues of professional image, career paths, and salaries, some aspects of which are already being addressed as part of the Association's Long-Range Plan. Only then will the SLA scholarships be fully

effective: We will be certain to attract the best of graduate students and, I hope, of practising special librarians. The awardees, in turn, will contribute to a rewarding, stimulating profession, proving SLA's "investment" in the scholarship program a sound one.

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Muriel Regan is a principal in the library services firm Gossage Regan Associates, Inc., New York City.

Accreditation: A Blueprint for Action

Vivian J. Arterbery

■ The Special Libraries Association's goal of full participation in the accreditation process of graduate library and information science programs is significant. Although SLA has not officially been a part of the accreditation process, its members, as members of the American Library Association, have served on the Committee on Accreditation. This paper includes the major recommendations from the Committee on Accreditation Project and discusses SLA's response to the COA report, as well as the background, issues, and implications of SLA participation.

For a decade or more special librarians have informally expressed an interest in accreditation. In 1982, the Board of Directors of the Special Libraries Association identified greater involvement in graduate library education and the accreditation process as one of twenty-six areas of professional concern. In 1983, the entire membership, through chapter ranking of these issues, pinpointed graduate library education and full participation in the accreditation process as one of the six priorities for the Association's long-range plan, covering 1984-1989. In September 1984, SLA joined 17 other organizations at the Association for Library and Information Science Education (ALISE) Conference to discuss sharing the responsibility for accreditation. (1) The ALISE Conference validated that the time was right to explore changes in the process of accrediting

graduate library and information science programs. In January 1985, seven SLA members met in Chicago to begin their participation in the 18-month, Department of Education funded, Committee on Accreditation (COA) Project to explore procedures and guidelines for opening the accreditation process to a variety of associations.

These events were historic, for since 1924 when the American Library Association (ALA) created its Board of Education for Librarianship, it has been responsible for accreditation of graduate library and information science programs. ALA is the organization officially recognized by the Council on Postsecondary Accreditation (COPA), the non-governmental, voluntary association of accrediting bodies, for accrediting the first professional degree programs. ALA carries out its responsibilities through its

12-member Committee on Accreditation, appointed for two-year terms by the ALA Executive Board.

SLA's Role

While SLA has not officially been a part of the accreditation process, its members, as members of ALA, have served on the Committee on Accreditation and on-site visit teams. The expanding role of special librarianship, the impact of information technology, the increasing number of special librarians/information professionals in non-traditional positions outside the library, and the envisioned future changes in special librarianship brought into focus the urgency of SLA having an official voice in the accreditation process. Perhaps, Koenig articulated the concerns of special librarians when he wrote:

One answer is that education for special librarianship is far more important than it has ever been before. Special Librarianship is no longer a step child category as in "academic," "public," "school," "special" and "other." The consequences of this development are major; library education has an obligation to respond smartly to the needs of special librarianship and special librarianship has an obligation and an opportunity to guide and evaluate that response. (2)

SLA's goal of full participation in the accreditation process of graduate library and information science programs is significant. But what are the implications for the Association of this participation? What does accreditation mean? Accreditation entails the establishment of standards for professional education and the evaluation of specific educational programs in light of those standards. The accreditation process is concerned with the quality of the educational experience provided by the programs designed for the preparation of librarians; it is not meant to be a tool for social amelioration, a means for controlling the supply of graduates, or a mechanism for dealing directly with social developments outside of the learning environment. (3)

SLA Responds to COA Report

The purposes of accreditation: establishment of standards and the evaluation of specific educational programs coupled with the recommendations from the COA Project on Accreditation provide the direction and approach for SLA to meet its goal. Table 1 summarizes the major recommendations from the Committee on Accreditation Project.

SLA President Frank Spaulding, in giving the Association's official reaction to the COA Project report, affirmed SLA's continued interest in full participation in the accreditation process.

We concur with Recommendation 1 that an Inter-Association Advisory Committee on Accreditation be formed with representation of all interested associations and institutions. And we concur that this Advisory Committee should work towards the desired state of a federated structure in which the participating societies function as co-equal partners to the greatest degree possible. And yet there is much to be done, to be explored, with little time available if we are to meet the needs of quality student education as identified by the interested societies who are concerned with the multidisciplinary facets of knowledge and information. (5)

SLA's participation on the Inter-Association Advisory Committee on Accreditation, if established by ALA, seems assured. But to be prepared for full participation in 1989, SLA must immediately turn to Recommendation 5 which calls for the development of a policy statement and the identification of educational requirements for special librarianship. These are the essential instruments for SLA's real contributions to the accreditation process and to the future of special librarianship. This is a challenging assignment, one which would be greatly simplified if Jane Robbins Carter's proposal for a five-year moratorium on the accrediting process, in order to study it and start anew, could be put in place. (6)

SLA has laid the groundwork: two Association-sponsored research studies focusing on skills and competencies have

**Table 1. Committee on Accreditation Project
Major Recommendations (4)**

1. The American Library Association should take immediate initiative to invite other interested professional societies to join it in the formation of an Inter-Association Advisory Committee on Accreditation.
2. The American Library Association should commit sufficient funds, estimated at \$25,000, as an augmentation of the budget of the Committee on Accreditation to cover the first year of operational expenses for the recommended Inter-Association Advisory Committee on Accreditation, with expectation that in subsequent years those costs would be shared equitably by participating societies.
3. The Inter-Association Advisory Committee on Accreditation should be charged with the following responsibilities:
 - to review the Final Report on the project, to evaluate the several recommendations embodied in the reports of the Working Groups, and to select those which should be implemented;
 - to identify the continuing costs involved in the implementation ... including the costs of the Inter-Association Advisory Committee itself;
 - to identify the appropriate formula for sharing of the costs of the Inter-Association Advisory Committee among the participating societies in subsequent years;
 - to identify potential sources for funding one-time costs involved in implementing other selected recommendations and to work with the Committee on Accreditation in developing and submitting proposals to other agencies;
 - to cooperate with the Committee on Accreditation in the implementation of selected recommendations and advise the participating societies on the progress in implementation;
 - to identify the appropriate formula for sharing of the continuing costs of accreditation among participating societies.
4. That for the foreseeable future accreditation should be focused on the first professional degree at the master's level.
5. That the Inter-Association Advisory Committee on Accreditation should work closely with each of the participating professional societies in the development of policy statements and appropriate documents that identify the educational requirements for both general and society-specific objectives, in forms that will assist the process of evaluation of programs for accreditation.
6. That the 1972 Standards for Accreditation and associated or related guidelines continue to serve as the basis for accreditation, but that the Inter-Association Advisory Committee on Accreditation should establish, in cooperation with the Committee on Accreditation, a review process aimed at identifying the needs for additional guidelines and perhaps eventual replacement of the 1972 Standards.

already been funded. SLA has also approved a policy statement on graduate education which states:

Special Libraries Association believes that graduate education should adequately prepare students for special librarianship/information management. The Association will:

- support formal library and information science education;
- form an integral partnership with educators of special library and information professionals to monitor the changing work and technology environments;
- participate in the accreditation process for graduate library and information science education;
- encourage its members, through Chapter networks or as alumni, to become active in their local schools of library and information science;
- assist in monitoring the skills and competencies required for special library and information management. (7)

SLA's Challenge

In considering the development of standards and educational requirements for special librarianship, five distinct issues dominate the discussion: (1) What will be the future information needs of our institutions? (2) How will information be delivered in the future? (3) What will be the role of special librarians/information professionals? (4) What impact will information technology have on the role of the special library as we know it today? (5) What fundamental knowledge and skills will be needed for future special librarians/information professionals?

To answer these questions, SLA must define the parameters of special librarianship. What is the scope of special librarianship? What is graduate library education to provide information professionals who plan careers in special libraries, information centers, or the other entities that are emerging for the delivery of information? Currently, professional library education in many ways prepares graduates to work in the library as a place—not as a function. With the tre-

mendous changes impelled by information technology, professional education must prepare future information professionals to provide "the library" in many different information settings.

Special librarians must agree on the components of a core knowledge of the field. The dilemma of approach or philosophy of graduate professional education must also be considered. We must reverse the trend of thinking evident in the literature and summarized by White: "Train them to work in our library with its specific needs and characteristics. Train them to be immediately productive from the day we hire them. . . ." (8)

Professional library education for special librarians/information professionals must be a process concerned with the acquisition and development of knowledge and skills that equip one to assume any number of roles in information management. The educational preparation of information professionals must provide the theoretical foundation that allows the adaptation of skills to all information settings or roles.

The COA Project Working Group on Curriculum identified five areas which must be considered in curriculum development:

- basic functions performed by special librarians/information professionals;
- the media involved;
- individuals and groups to be served;
- various job activities;
- the environments. (9)

This assessment should also include alternative environments in which information activities may take place, so that educators can design educational experiences that illustrate applications in those settings. The impact of information technology on the library is not limited to the setting; it is also changing the media as well as the function of the librarian. End-user searching, for example, dramatically highlights the special librarian's educational function. So, these five factors are critical in the develop-

ment of future educational requirements. The basic curriculum might be expanded to include principles of information-seeking behavior and information organization, as well as archival management, database management, information science, and records management.

While special librarians seem to be in a quandary about educational requirements, there is a keen awareness of the importance of the effective use of information. Meaningful input into the accreditation process also requires the definition and articulation of what makes an effective special librarian. Both accomplishments and failures must be examined in this appraisal. What has prevented special librarians from realizing the full potential of what we have to offer our institutions? What skills do we lack?

Final Call

The implications of SLA's full participation in the accreditation process are far reaching. First, there are considerable costs. More fundamentally, to contribute to the evaluation of educational programs, special librarianship must have clearly defined standards and educational requirements for the professional education of information professionals who choose careers in "special librarianship." Those standards can only be developed when there is unified understanding among special librarians of what we really do and where we are headed as information professionals.

In the past, special librarians have informally criticized the value and quality of graduate library education as presently structured and the call for revision in the curriculum has been with us far too long.

Preparation for full participation in the accreditation process is the catalyst for introducing new approaches to professional library education. Now is the time for action.

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Vivian J. Arterbery is library director at the Rand Corporation in Santa Monica, California.

Rosabeth Moss Kanter Speaks at the SLA Boston Conference, June 9, 1986

speech summarized by Linda L. Hill

■ This summary of the first General Session of the 1986 SLA meeting in Boston is based on a tape recording on a very small recorder. It is intended to give the main points of her talk and some of its character through a sampling of her wonderful stories. It is no substitute for being there or for reading her book *The Change Masters*. I may have taken some liberty with phrasing, but I hope not with the ideas.

Linda L. Hill

(Editor's Note: Rosabeth Moss Kanter, professor of sociology and professor of organization and management at Yale University School of Management, has kindly given us permission to print the following summary of her speech "The Change Masters: Keys to Successful Innovation," which was delivered at the General Session of the 1986 SLA Annual Conference in Boston.)

Charles Lamb wrote a "Dissertation on Roast Pork," a fable on the discovery of cooking, to illustrate the nature of learning and the importance of true understanding. Way back in ancient China, when people lived in primitive surroundings, animals sharing the house and wandering in and out, the people ate their food raw. One day the father left and while he was gone the eldest son accidentally set the house on fire. When the father returned he poked around in

the ruins to see if anything was salvageable. He happened to touch one of the neighborhood pigs that was caught in the fire. When he touched it, it was hot and he pulled his hand away. He put his fingers in his mouth to cool them off and the taste was absolutely delicious. He had just discovered cooking. News of this great discovery spread throughout the countryside and soon all the people throughout the area were burning their houses down. The moral of this story is that if you don't understand why the pig gets cooked, you're going to waste an awful lot of houses.

The challenge is how to bring about constructive change within organizations without wasting the whole house. Our present competitive environment is forcing all organizations to change. Innovation is needed.

The rules of the game are always changing: regulations, population characteristics, consumer demands, etc. Employee expectations are also changing. Innovators are increasingly rights conscious. They expect a voice in decision making; they expect a career as a matter of entitlement. There is more entrepreneurial spirit, where the direct contribution that I personally make is important. People want a piece of the action. They want to have pride of ownership.

The following formula illustrates the present situation and the challenge: $MTBS \geq MTMD$. This stands for *the mean time between surprises must be greater than or equal to the mean time to make a decision*.

Organizations are unravelling red tape. They are "delaying." This is a wonderful term because in fact bureaucracies are "delayers" of decisions. Decisions have to go through so many channels—steps that are nothing more than the passing on of information or stopping the process from going forward.

Change Masters understand trends and can move with them, and can move productive new ideas into use much more quickly than we used to be able to do with the old style bureaucracy.

There are seven basic skills for mastery of change:

- A. The ability to change a need or a problem into an opportunity.
 - Maslow said that to a little boy with a hammer everything looks like a nail. The Change Master tunes into the environment, rather than into internal skills. Keep in close touch with the environment; tune into emerging needs. It is often the user who suggests change, who triggers change. But you can't ask on a questionnaire, "Tell me what you don't yet have." The American public did not demand the personal computer.
 - "If life gives you lemons, make lemonade."



Rosabeth Moss Kanter speaks at the 1986 SLA Boston Conference.

- Change Masters tune into things outside their own field. One publisher asks, "What else is going on in your life," when he calls to ask about features of his magazines. Crossing boundaries is important. Spend time with people who challenge you. Take the meeting budget and send people to meetings outside their own field.
 - As people rise, their capacity to innovate goes down. What you gain is the ability to surround yourself with people who agree with you. You shelter yourself from the shocks that other people face.
- B. The ability to engage in kaleidoscopic thinking.
 - In a kaleidoscope, the exact same fragments form different patterns when you change angles, twist, or change perspective. There are many different ways to put the pieces together. Start

with a large menu of possible approaches before getting locked into one point of view.

- Fred Smith of Federal Express got the idea for his business as an undergraduate at Yale. He wrote a paper about it and got a C in the course. It sounded like a ridiculous idea to take all the mail in the country to Memphis and redistribute it. Dr. Kanter offered to take his transcript back to Yale to see if she could get his grade changed to a B+. A million and a half in revenues should be worth a B+.
- Outside experiences challenge set patterns. It used to be the conventional wisdom to manage by "minding the store." But the idea for frozen food was prompted by a trip to Labrador where the founder of Bird's Eye Frozen Foods encountered frozen fish. The moral: Send people to Labrador (figuratively speaking).
- The most imaginative management meeting: The annual financial review and goal setting meeting started out in the hotel ballroom, as always. Speeches were scheduled and were begun. Suddenly the doors burst open and uniformed men came in and grabbed everybody and took them to helicopters waiting nearby. They flew to a second meeting site. The president said, "Now we begin again. Leave your old ideas back at the first place. Only new ideas here." You can imagine the silence that ensued. It is hard to unlock your thinking when you are in the same setting.
- He continued the meeting by going to the beach. (This is California, by the way.) A parade of elephants came by. There was a small one, a medium-sized one, and a huge one, each with a financial goal painted on its side. The small one was their present goal. The idea was to challenge

the group to stretch their goals. Having an executive take the risk to do this sort of thing sends a strong message to the staff.

- It is perhaps no accident that many innovative organizations are in California. They have a culture of play and irreverence. Creativity is playing with ideas; innovation is irreverence against someone's tradition. Organizations that stifle innovation are populated by a different kind of animal—invisible ones. They are sacred cows. To be innovative you must keep in touch with challenges and reward fresh looks.
- C. The ability to communicate a clear and compelling vision of what the payoff will be.
- In the beginning, a new idea is only an off-the-wall notion and innovations are inherently risky. Leadership is required to convince others of the wisdom of the idea. Venture capitalists support the person, not the idea.
 - Martin Luther King said, "I have a dream." He didn't say, "I have a few ideas but there may be a few problems out there. Let's set up a committee. . . ."
 - Brigham Young led the Mormons in a clearly westward direction. He didn't say, "We'll go west for a while. If that doesn't work out, we'll travel south." Who would have signed up to go along?
 - Management is basically concerned with keeping things under control. It takes leadership and courage to move things in a different direction.
- D. The ability to build alliances and coalitions.
- Most innovations require support or means greater than is available within the individual's own department.
 - One of America's 10 toughest managers, whose motto is "Busi-

ness is the last monarchy," builds coalitions. When he was going through a major reorganization, he took a table in a restaurant in New York and invited those whose support he needed one by one to lunch. He got them on the team, made modifications, etc. When it was time to implement the plan, they hit the ground running.

- Plant a few seeds around the organization to avoid surprises. An effective team-building method is to call a big meeting and announce a change. It builds a team in opposition to you. When people hear something for the first time which is totally unfamiliar, often their only possible response is "No."
- "Tin cupping" is another process that consists of going around and asking for contributions of staff, money, equipment, etc. for your project.
- Consultation is also a good sanity check. "Are you out of your mind?"

E. The ability to work with teams.

- Data General's Tom West used competing teams to get what some said was impossible done. They worked 60-, 80-, 100-hour work weeks. When Dr. Kanter assigned *Soul of a Machine* to her students at Yale, they thought it was a book about exploitation of the worker. You get a higher quality team when people are allowed to be individuals. Everybody on the team is special. Identity of the teams is important, like sports teams. Other elements: free team members from distractions; eliminate frequent reporting; give pep rallies; emphasize solving problems together; celebrate milestones. West used to leave his idea on the back of an envelope where they would find it when one of his teams was stuck.

F. The ability to persevere and persist.

- Everything looks like a failure in the middle. Three of the reasons for this are: a) The forecasts were faulty and time and resources become scarce; b) Unexpected roadblocks materialize; c) Political problems arise.
- In the beginning, the project is only an idea and those in power think, why waste a good negative; it may fail on its own. But in the middle, it begins to look like this thing might really happen and they start to think seriously about it.

G. The ability to share credit and recognition and make everyone a hero.

- When a manager received credit for a successful cost-savings effort, he got a bonus. He asked that his staff also get bonuses. Being the kind of company it was, the answer was "no." So the manager took money out of his own pocket and collected money from other managers and they created their own pool. They created an environment of caring and their people began to look around for additional ways that they could contribute.
- The reward doesn't always have to be money.

The characteristics of companies that support this behavior are:

1. Job descriptions are broad, rather than narrow, and the focus is on results.
 - When Toyota and GM joined forces on a joint venture, they had to adjust their job descriptions: Toyota had 3 and GM had 33 covering the same activity.
 - The typical job description in a high-tech company is said to be "Do the right thing."
 - The worst thing you can hear an employee say is "That's not my job."
2. They organize around project teams

that have every specialty that they need on the team.

3. They have a culture of pride. "All of our people are good and they're getting better all the time." A culture of mediocrity, in contrast, is that anyone who has worked there for more than two years must be a real fool. Getting new ideas from outside the company through new managers or consultants is a sign of a culture of mediocrity.
4. They communicate more; make information available. They encourage networking and minimize barriers to talking across levels and traveling from place to place. Digital Equipment has a regularly scheduled plane that anyone in the company can use, regardless of position, for business purposes.
5. They loosen up the organization. Anybody can see anybody. Decision making is decentralized. Managers may have a percentage of their funds that they can spend without approval from above. A long-range plan gives direction to this type of organization.
6. They are integrated organizations, as opposed to segmented organizations. Jobs overlap instead of being chopped up into distinct territories and levels. There is open communication instead of channels.

The corporate philosophy of those organizations that prefer to remain second

rate (See page 101 of *Change Masters* for the complete description) is:

1. Be suspicious of any idea from below. If the idea was any good, we at the top would have thought of it already.
2. Require many levels of review of ideas. A variation to this is to let departments challenge other department's ideas and just listen to the survivors.
3. Express criticism freely, withhold praise, and create job insecurity. This shows that you have "standards." Geneen's macho theory of management: People do their best work when they are terrified.
4. Do not give any advanced warning of change. Announce major reorganizations, etc. on the radio.
5. Count everything. Tight management keeps everyone busy reporting and not making waves.
6. Those at the top know everything.

Change is always a threat when it is imposed. It's an opportunity when you are in on it. Closing advice: Go whole hog. Remember the Jesuit principle: It is easier to beg forgiveness than to ask for permission.

Linda L. Hill is the assistant director for Editorial Services, Information Services Division, at the University of Tulsa.

The Salary Survey in Perspective

Mary Frances Malone

Editor's Note: In honor of the centennial of library education in the United States, SLA asked Mary Frances (Hoban) Malone, assistant dean of the Graduate School of Communication at Fairfield University and former SLA manager of professional development, to write a brief summary on the history of the Salary Survey and the changes that have occurred in the survey over the past years. As manager of professional development, 1978 to 1983, Ms. Malone set up the continuing education program as it now exists, as well as produced the Salary Survey.

From its inception in 1967, the Salary Survey has provided an interesting and valuable tool for the profession and the membership. Over the years the survey has remained stable, that is the response rate has differed little from year to year and the percentage increase has risen steadily but uneventfully. Until 1983, the complete questionnaire and the updates covered the same areas each survey. In that year, the association expanded the questionnaire in the hope of attaining more complete salary information. They realized that supervisory experience, number of personnel, and job title play an important part in determining salary level. In addition, the type of institution information provided a more complete analysis of salary data. The more comprehensive breakdown of data is especially helpful as members enter into salary negotiation. It also aids wage

and salary administrators who require organizational and geographic data.

Over a nine-year period, from 1976 to 1985, salaries in all percentile ranks nearly doubled. This indicates an economic growth in the profession comparable to educators and other service professions. The growth also parallels that of United States government services. While the salary survey growth is stable, the figures perhaps do not completely reflect the economic changes in the profession. One must remember that averaging figures over time tends to stabilize or level them. One needs to examine some highs and lows over the years to spot some facts about the profession.

For example, in 1985 on the lowest end of the scale men make eighteen percent more than women, while on the highest end of the scale men's salaries are twenty-seven percent higher. It would seem that the gap grows wider as people advance in the profession. This phenomenon of salary differentiation mirrors many other professions.

On the geographic front, the relative position of the East South Central region of the United States shows a significant change. In 1982 this region ranked fourth in salary rating while in 1985 its rank dropped to tenth, the bottom of the scale. The number of jobs in that area, or at least responses from the area, doubled. Thus perhaps the drop in relative positions reflects more of an entry-level

growth for the profession than a stagnating of salaries.

Another interesting point, when comparing figures over the years, is the age of respondents. Most service industries, such as teaching, have an abundance of personnel moving close to retirement. Figures for the special librarians, or at least the respondents to their surveys, indicate a slight growth in the 30 to 39 year olds. The so called "baby boomers" seem to be filling the ranks of information professionals in all industries.

Mobility, a characteristic of much of corporate America, seems less evident among special librarians. For the most part, the majority of respondents worked for one, and not more than two, employers. This has not necessarily improved their salary increases but it may indicate job satisfaction.

One reason salary trends appear so sta-

ble may relate to the types of organizations represented. A vast majority of respondents work in government, academic institutions, and non-profit organizations. Traditionally, drastic economic changes least affect these organizations.

Among all the other industries mentioned, the information brokers closely align with the rising trend of entrepreneurship. This group increased in number and ascended from the lowest rung of salary distribution by type of institution ranked in order of median salary to the top third of the group.

In summary, the salary survey provides a valued service to members, to the profession, and to the industries that employ information specialists. The lack of dramatic trends results primarily from the methodology used in these surveys. In balance, the survey makes not exciting, but valuable, research material.

1986 Salary Survey Update

In an effort to assist special librarians in salary negotiations, Special Libraries Association conducts an in-depth salary survey every three years. During intervening years the Association, using a random sampling technique, polls 25% of the membership to provide current salary information. The results present an overview of special librarians' salaries, as well as a measure of annual salary increases since the last survey.

The 1986 data update the overall national and regional salary data reported in the 1985 in-depth triennial salary survey report. While not as comprehensive as the 1985 survey report, the 1986 update indicates general national salary trends. Used in conjunction with the 1985 report, the 1986 information provides special librarians with guidelines for salary discussions.

During April-May 1986, a 25% sample of Members and Associate Members received the survey questionnaire.

Questionnaires Mailed	2,905
Questionnaires Returned	1,195 (41%)
Invalid for Computation	101
Useable Responses	1,094 (37.6%)

Table 1 reports the changes in mean and median salaries from April 1, 1985, to April 1, 1986, within nine U.S. census regions and Canada. The figures illustrate changes in dollar amounts and percentage increase or decrease.

The survey indicates an overall median salary increase in the United States of \$2,300 from \$26,500 in 1985 to \$28,800 in 1986. This represents an 8.0% increase over last year. The overall mean salary reflects a \$2,206 increase from \$27,974 in 1985 to \$30,180 in 1986—a 7.4% increase.

A median salary increase in Canada of \$1,440 from \$31,740 in 1985 to \$33,180 in 1986 took place. This represents a 4.4% increase since last year. The overall mean salary reflects a \$2,060 increase from \$32,696 in 1985 to \$34,756 in 1986—a 6.0% increase.

A comparison with past surveys indicates an increase of 13.2% in the median salary within the United States over the last three years. The median rose from \$25,000 in 1983 to \$28,800 in 1986. The 1986 data are reflective of a 12.3% increase in the mean salary for the United States from \$26,489 in 1983 to \$30,180 in 1986.

Table 1. 1986 Mean & Median Salaries by Census Region in Rank Order of % Change in Median from 1985 to 1986

Census Region	Median % of increase (or decrease)			Mean %		
	1985	1986	1986	1985	1986	1986
Canada*	31,740	4.4	33,180	32,696	6.0	34,756
Pacific	29,192	5.9	31,000	30,551	6.1	32,519
Middle Atlantic	28,000	11.2	31,500	30,322	9.3	33,418
South Atlantic	28,000	0.0	28,000	30,008	6.0	31,907
New England	26,200	12.5	29,937	27,451	10.5	30,649
East North Central	26,000	5.5	27,500	27,611	8.1	30,033
West South Central	26,000	8.4	28,371	27,180	7.1	29,240
Mountain	25,750	(6.5)	24,096	26,145	(3)	25,383
West North Central	24,600	18.0	30,000	25,979	15.7	30,812
East South Central	24,500	14.1	28,500	26,527	4.1	27,660
Overall United States	26,500	8.0	28,800	27,974	7.4	30,180

*Salaries reported in Canadian dollars. The exchange rate on April 1, 1985, was approximately Canadian \$1.37 = United States \$1.00. On April 1, 1986, the rate was Canadian \$1.39 = United States \$1.00.

Table 2. Salary Distribution by Census Region in Rank Order of 1986 Median

Census Region	Average Lowest 10%	25th Percentile	Percentile Median	75th Percentile	Average Highest 10%	Mean	No Respondents
Canada*	22,182	30,000	33,180	39,000	53,061	34,756	118
Middle Atlantic	19,132	26,000	31,500	37,958	58,214	33,418	310
Pacific	20,997	26,832	31,000	36,225	50,412	32,519	168
West North Central	17,776	25,000	30,000	35,000	49,368	30,812	46
New England	16,414	23,000	29,937	35,000	54,269	30,649	77
East South Central	16,350	19,419	28,500	31,000	50,000	27,660	11
West South Central	18,983	24,400	28,371	34,000	41,933	29,240	59
South Atlantic	17,312	24,000	28,000	38,000	57,533	31,907	110
East North Central	19,224	24,000	27,500	34,000	50,042	30,033	175
Mountain	17,625	21,715	24,096	29,500	32,375	25,383	20
Overall United States	18,201	23,818	28,800	34,520	49,349	30,180	976

*See Footnote to Table 1.

Canadian survey comparison indicates an increase of 14.1% in median salary during the last three years, rising from \$28,500 in 1983 to \$33,180 in 1986. A 9.3% increase in the mean salary occurred; the mean rose from \$31,553 in 1983 to \$34,756 in 1986.

All regions sampled, except for the Mountain and South Atlantic regions, experienced a median salary increase. The increase ranged from 18.0% to 4.4%. The South Atlantic region experienced no increase and the Mountain region median decreased by 6.5% between 1985 and 1986.

All areas, except the Mountain region, experienced an increase in mean salary ranging from 15.7% to 4.1% above 1985 figures. The Mountain region experienced a 3.0% decrease in mean salary.

Table 2 lists the salary distribution in rank order of 1986 median salaries for Canada and

nine United States census regions. In comparing rankings with the 1985 salary survey data, the three regions showing the greatest change are the West North Central region, which moved up from eight to three, the East South Central region, which moved up from nine to five, and the South Atlantic region, which moved down from two to seven. Canada and New England showed no change. The Mountain and East North Central regions moved down two positions while the Middle Atlantic region moved up two positions. The East North Central and South Atlantic regions moved down one position.

Table 3 lists salary distribution by four job titles: Manager, Assistant/Section Head, Librarian/Information Specialist, and Support Staff. The data are combined for the nine census regions and Canada. Managers' salaries ranged from \$23,011 to \$63,184 with a mean

Table 3. 1986 Salary Distribution by Job Title, United States & Canada Combined

Job Title	Average Lowest 10%	25th Percentile	Percentile Median	75th Percentile	Average Highest 10%	Mean	No Respondents
Manager	23,011	31,000	36,000	43,888	63,184	38,404	404
Assistant/Section Head	21,820	26,712	30,617	35,125	44,455	31,122	128
Librarian/Information Specialist	17,679	23,000	26,820	31,500	41,506	27,729	548
Support Staff	11,685	17,400	20,400	26,438	35,320	22,145	14

salary of \$38,404. Assistant/Section Heads earned from \$21,820 to \$44,455, the mean was \$31,122. Individuals holding the title Librarian/Information Specialist had salaries ranging from \$17,679 to \$41,506 with a mean of \$27,729. Support staff salaries ranged from \$11,685 to \$35,320, the mean was \$22,145.

A comparison of 1984 Salary Survey data indicates that median salaries at the managerial level rose from \$33,000 to \$36,000. This represents an 8.4% increase from April 1, 1984, to April 1, 1986. The mean salary in 1984 was \$34,643 rising to \$38,404 in 1986—a 10% increase. The median salary for Assistant/Section Heads increased from \$26,780 in 1984 to \$30,617 in 1986—a 12.6% increase. The corresponding mean salary increased

13.4% from \$26,976 in 1984 to \$31,122 in 1986. Librarian/Information Specialists' median salary rose 6.8% from \$25,000 in 1984 to \$26,820 in 1986. The mean increased 8.7% from \$25,343 to \$27,729. The median salary for support staff in 1986 was \$20,400, a 6.9% increase from the 1984 report of \$19,000. Mean salary also increased from \$20,054 to \$22,145—a 9.5% rise.

The 1986 Salary Survey attempted to define the number of respondents unemployed during the period April 1, 1985, to April 1, 1986. Of the 1,094 valid responses, 45 participants (4.1%) indicated unemployment during a portion of this period. Average length of unemployment was four months.

Actions of the Board of Directors

June 6–7 and 13, 1986

The SLA Board of Directors met at the Boston Sheraton during the Association's 77th Annual Conference. Actions taken and reports of note are summarized below.

Long-Range Plan—The Board of Directors approved four new priorities for the Long-Range Plan: Membership Development, Government Relations/Information Policies, Research, and Organization.

Association Election—The Tellers Committee reported the results of the Association's election. The newly elected officers are as follows: Emily Mobley, president-elect; Hope Coffman, Chapter Cabinet chair elect; Ruth Seidman, Division Cabinet chair elect; Jane Cooney, director; and Catherine "Kitty" Scott, director. Laura Rainey was elected secretary.

Committees—The Special Committee on Membership Development gave a final report. As a result of the committee work, the Board directed staff to do the following: 1) prepare a sample recruitment brochure to be distributed to Association units in January 1987; 2) prepare a recruitment manual for distribution at the 1987 Winter Meeting; and 3) conduct membership recruitment beginning in January 1987.

The Special Committee to Study the Name of the Association reported that it will place articles in upcoming issues of the *Specialist* to solicit input from the membership on the name of the Association.

The Board appointed two special committees in response to the additions to the Long-Range Plan: one committee will investigate areas for membership growth and the second committee will develop an overall research plan and highlight areas of special concern to special librarianship.

Annual Conference—Mary Lou Stursa was nominated and approved as the 1988 Conference Program chair. Marilyn Stark will serve as deputy chair.

The Board also passed a motion to affirm the Association's stance that child care at the

Annual Conference will remain the responsibility of the individual conference attendee.

The Ad Hoc Committee on Association Committee Programs presented seven recommendations on committee programming at the Annual Conference that were referred to the Committee on Association Structure. The recommendations are intended to provide guidelines for the funding of conference programming, ensure coordination of all conference programming, and guarantee the quality of all programs at the Annual Conference.

The Board passed a motion establishing a special committee to include former Conference Program Planning Committee members to recommend a peer review procedure for Contributed Papers that will be added to the guidelines for Conference Program Planning. The special committee will report to the Board at the June 1987 meeting.

Government Relations—The Board approved a resolution requesting President Reagan to call a White House Conference on Library and Information Services to be held not later than 1989.

In response to the imposition of import levies by the governments of the U.S. and Canada, the Board approved a resolution opposing any trade restrictions that restrict the free flow of information.

SLA Representatives—The Association Board approved motions to establish SLA representatives to the North American Serials Interest Group and the Art Libraries Society of North America.

Divisions—After discussion at the Division Cabinet Meeting, the Board approved a request, beginning with the Anaheim Annual Conference, that the continuing education programs, sponsored by divisions at the Annual Conference, remain on Thursday without competition from Association-sponsored programs and that all risk and responsibility remain with the sponsoring division. The policy will last for two years.

Chapters—The Board approved a policy requiring any contract, agreement, or obligation

entered into by an Association unit that exceeds \$2,000 be reviewed and signed by the Executive Director. The policy also requires that any liability that exceeds the unit's budgeted or available funds must be approved, in advance, by the Association Board.

Joint Cabinet—The Joint Cabinet recommended that all Association unit promotional materials be sent to the Association's Director of Communications, prior to publication, for review in order to assure the accuracy of SLA information.

Other Business—The Executive Director was authorized to explore the design revision of the Standard Industrial Classification (SIC) Code currently under revision by the U.S. Office of Management and Budget.

Fred Kilgour, Founder/Trustee of OCLC, was elected an honorary member by the Association membership at the Annual Business Meeting.

Nat Whitten, SLA Student Relations Officer, was commended by the Board for his successful efforts on behalf of SLA student groups.



WINTER EDUCATION CONFERENCE '87

**January 30–February 1, 1987
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The field of library and information science is rapidly changing due to advanced technology, new methods of management, and expanding user needs. The 1987 Winter Education Conference will offer a series of professional development activities designed to prepare information specialists for this changing environment. Don't miss this opportunity to interact with experts in the field and participate in a series of unique professional development activities.

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READER RESPONDS TO MICROCOMPUTER ARTICLE

In reply to "Microcomputers as On-Line Catalogs in Special Libraries," by Julia B. Faust in the summer 1986 issue of *Special Libraries*, several points need to be made to correct some impressions left by this article. I agree that articles such as this telling about "successful" local operations should be published, but I shudder to think that others will use this particular experience as a model.

The most important points I want to make are:

1. Before choosing the microcomputer, check into the availability of *appropriate* software. IBM-type microcomputers are used by the majority of the library packages that I know about. I believe that there are far fewer available for the Apple.
2. Database management packages that are designed for library applications are *far superior* to all-purpose database management software. Specifically, they provide a variable number of fields of variable length. That is, fields can be "repeated" as necessary for a particular record, and the lengths of the fields do not have to be specified in the beginning when record formats are established. Second, they provide sophisticated search capabilities: Boolean operators, phrase searching, inverted indexes, browsing, etc. And third, they often provide authority checks, sorting routines that correctly sort call numbers, checks for uniqueness, and special processes for circulation and acquisitions.

I recently set up an online catalog system for a small library for a total cost of \$5700. This included the software for the catalog, a microcomputer configured with a 20 Mb hard disk and 2 floppy disk drives, a 20 Mb tape backup with six cassette tapes (one for each day and an extra), a high resolution monitor, an internal 1200 baud modem, a surge protector, and an LQ-800 Epson printer with a box of paper and three extra ribbons. Acquisitions and minimum circulation requirements were adequately handled by the software, in

addition to the online catalog and various printed reports. Start up time was minimal; the documentation was good and the setup routines were easy to use. There were no conversion costs; this is a brand new library. (We also purchased word processor and spreadsheet software for a total of \$519.)

Decision makers should be reminded that there are software packages designed for libraries that are available at a reasonable cost for small operations; and further, it should be noted that these packages are *not limited* to typical library operations but can also be used for other types of records.

Linda L. Hill
Tulsa, Oklahoma

REMEMBERING HAROLD HAMILL

Imagine meeting the legendary Harold Hamill when I was just starting out as a special librarian in LA in the fall of 1948! For that is exactly what happened to me and I'll never forget it. His equally distinguished Administrative Assistant, Katherine Laich, was active in the SLA Southern California Chapter and at that point in time, she was handling employment. So I made a beeline to LAPL and had an informative discussion with Miss Laich. Before I left her office, she led me to Mr. Hamill's and we were introduced under fortuitous circumstances, I might add.

At Columbia University, during my library school days, I had heard something about Mr. Hamill, how he had fought a political machine and was fired. But I was unprepared for his imposing presence, his wit and charm which were overwhelming. On another occasion, when both Mr. Hamill and Miss Laich appeared at an SLA function, I heard the version from Mr. Hamill himself. I might add that he actually boasted about being fired from a position which would have resulted in his compromising his principles. Speak about library ethics! Here it was in person and it was inspiring and I had several occasions to recall it vividly and to put it into practice, as Mr. Hamill demonstrated.

Reading about his recent death brought back memories of my early years in LA and

SLA and I realized once again how fortunate I had been to have met such an indomitable personality in the profession. LA was just beginning to be exposed to the concept of special librarianship and I needed all the help I could get—and I did. I'm grateful for the memories and I realized, over the years, that Mr. Hamill was glad he had had something to do with

steering me in the right direction when I was a babe in the woods.

Sherry Terzian, M.S.
Director of the Mental Health
Information Service
Neuropsychiatric Institute
University of California, Los Angeles

Reviews

Careers in Other Fields for Librarians: Successful Strategies for Finding the Job, by Rhoda Garoogian and Andrew Garoogian. Chicago: American Library Association, 1985. 171p. ISBN 0-8389-0431-9. \$12.95.

The stated purpose of *Careers in Other Fields for Librarians* is to provide an in-depth look at the opportunities that exist in other fields and to assist librarians who want to make such a change. Essentially, it is a "how-to" for changing fields.

Other books on alternative careers have illustrated non-traditional jobs through success stories and testimonials of librarians in non-traditional positions. The Garoogians take a different approach, comparing traditional library skills to qualifications listed in employment advertising and job descriptions. They develop and present a technique by which librarians can analyze the transferability of their education and experience to other positions.

The book is in three parts. Part 1 analyzes librarians' knowledge, skills, and attitudes and how these abilities transfer to other occupations. The authors also discuss stereotyping of librarians and suggest ways that librarians can overcome their public image—or lack thereof. Part 2 examines opportunities in the areas of business, government, education, and entrepreneurship (freelancing). Most of the positions used for illustration are in the areas of research analysis, planning, publishing, database services, records management, public information, and similar areas that deal with information handling, research, and communications skills. Part 3 covers formal and informal sources of job leads, resumes and letters, and interviewing.

The applicability of the skills of librarianship to other fields has been demonstrated by librarians who have made career changes and by the few employers who are recruiting library school graduates for non-traditional positions. There are also barriers, perhaps artificial, but nevertheless present, to such changes. One, as other authors as well as the Garoogians have pointed out, is the need for librarians to break away from viewing themselves as tied to the institutional (public, academic, school, or special library) setting and to begin to think of their information handling and communications skills as applicable to many situations. The skills comparison de-

scribed in this book should provide an effective tool for librarians to use in overcoming this barrier.

Employer recognition of librarians as candidates for non-traditional positions is a more difficult barrier to overcome. Although the number of employers actively seeking librarians for other positions is growing, the majority is not yet so enlightened. The Garoogians offer some help—for instance, in preparing resumes that stress applicable experience in desired skills and in suggesting ways in which librarians can be more assertive and library schools and library associations more helpful in promoting the wider applicability of librarians' information handling skills.

On the basis of the types of jobs described, the book is most appropriate for librarians who already have some experience and who are considering changing to another field. In addition, as the authors do point out, background in a subject field or area such as research methodology, statistics, or marketing may also be required, leading to the need for additional preparation for a particular career change.

Careers in Other Fields for Librarians outlines a practical approach to career changing and should be of interest not only to interested librarians but also to library schools, library associations, and placement services that are interested in expanding opportunities for librarians.

Elin B. Christianson
Library Consultant
Hobart, Indiana

Collection Assessment Manual for College and University Libraries, by Blaine H. Hall. Phoenix: Oryx, 1985. 212p. ISBN 0-89774-148-X. \$36.50.

This slim volume, a revision of Hall's *Collection Assessment Manual* (ERIC document ED 217852, 1981, 171p.), will probably be of little use to most special librarians. Although the author emphasizes that the principles and techniques described can be used or adapted for use by librarians in any type of library, the contents are weighted toward academic libraries. For instance, 51 pages of this 212-page work are taken up by a reprint of the readily available ACRL academic library standards. Other appendixes are devoted to academic accrediting groups and sample survey instruments developed at academic libraries.

The main body of the book, excluding appendixes, bibliography, and index, consists of only 111 pages. The work thus appears to be both heavily padded and overpriced.

This manual would probably be of most value to inexperienced assessors in departmental or division libraries in academic institutions. Hall has performed a valuable service to the library profession by providing an overview of the topic, drawing on ALA guidelines for collection development and standard works by authorities such as Mosher, Kantor, Line, Sandison, Bonn, Lancaster, and others. It is, however, sometimes difficult to determine where Hall is summarizing and where he is merely paraphrasing; he does not always seem to cite his debt to other authors. Hall provides a broader rationale for practical techniques and procedures than one typically sees in a book on this subject. His work can thus be used as a training manual as well as a sourcebook of evaluation instruments. The book is clear and concise and, combined with a careful reading of the sources listed in the bibliography, could be used to develop tailor-made instruments and programs for collection management.

Richard Shotwell

Administrative & Reference Librarian
Sterling Morton Library
The Morton Arboretum
Lisle, Illinois

Continuing Education for the Library Professions, by William G. Asp, Suzanne H. Mahmoodi, Marilyn L. Miller, Peggy O'Donnell, and Elizabeth W. Stone. Hamden, Ct.: Shoe String Press, 1985. 256p. ISBN 0-208-01897-2. \$25.00.

The reader can approach this collection of essays as a continuum—beginning with an excellent historical overview, which describes the contributions of Melvil Dewey, Charles C. Williamson, and other early figures important in the development of thinking relating to continuing library education, and ending with current thinking by contemporary experts. Other readers more concerned with a particular aspect of continuing library education can zero in on individual sections of the book devoted to the role of the library associations in CE; the state library agency and its CE activities, or the place of the library school in CE. In addition to the treatment of providers of continuing library education,

the volume includes an examination of the processes involved in marketing CE.

The literature, surveys, and other sources upon which the book is based are carefully documented, and the excerpts from these sources are well presented.

The successes and failures involved in CE are objectively set forth. Stress is placed upon the pressure that rapidly changing technology places upon the information professional and how this pressure is translated into a need for quality CE. The seriousness of the necessity for quality continuing education is summed up in the comments of Malcolm Knowles made at the first assembly of the Continuing Library Education Network and Exchange in 1976. Quoted in this volume, Mr. Knowles identified the greatest threat to civilization in the next century as "the impending obsolescence of man, and particularly in the professional segments of society. . . ."

This well researched look at continuing library education is recommended to every person currently involved in the information field and to anyone considering entering the field. The lengthy bibliography provides an opportunity to follow an interest in CE to greater lengths.

John V. Ganly
Chief

Economic & Public Affairs Division
The New York Public Library
New York, New York

Information Technology in the Library / Information School Curriculum, edited by Chris Armstrong and Stella Keenan. Brookfield, Vermont: Gower Publishing Co., 1986. 266p. ISBN 0-566-03526-X. \$53.95.

The conference, held in London in December 1983 and sponsored by the British Library Research and Development Department, which produced these proceedings, was aimed at library educators, managers, and others in the information community for whom the technology and methods in use for teaching information technology had a particular immediacy. While the introduction to the collection stresses "the international dimension of the whole conference," and proceedings relating to experiences in the Netherlands, West Germany, and the United States are included, the main emphasis is on the British scene.

The value of these proceedings after a period of two years is basically historical and

comparative and remains highest for the audience for which the conference was originally intended. The keynote address delivered by Blaise Cronin has a wider appeal and constitutes an excellent summing up of the problems and opportunities implicit in the development of effective information technology teaching programs. There is much in Mr. Cronin's remarks concerning what is taught, where it is taught, by whom it is taught, and for whom it is intended that has meaning for everyone in or planning to enter the information field.

Other papers in the compendium deal with specific teaching-related issues. The technology emphasized in these papers focuses on online searching; other forms of information storage and retrieval are mentioned briefly, if at all. Individual papers deal with the use of simulations and emulations as teaching aids for online searching; the use of a model circulation control simulation as a library management teaching aid; the Australian experience in preparing library professionals and paraprofessionals to deal with changing information technology; and information technology in the Dutch library school curriculum among other topics. In a few instances the full text of a given paper is not included; however, a contact source for the complete paper is noted. Two indexes are provided, a personal name index, which includes cited authors as well as the authors of the papers in the collection, and a subject index.

The scope of this collection and its coverage, on an international basis, of some key issues in library education make it a useful addition to the library school library.

John V. Ganly
Chief

Economic & Public Affairs Division
The New York Public Library
New York, New York

International Guide to Library and Information Science Education: A Reference Source for Educational Programs in the Information Fields World-Wide, edited by Josephine Riss Fang and Paul Nauta with the assistance of Anna J. Fang. New York: K. G. Saur, 1985. 537p. ISBN 3-598-20396-9. \$46.00.

Have you ever needed to compare the educational background of a professional librarian from Zambia with that of one from Austria; or compare the difference in educa-

tional levels of library and informational scientists from various countries; or locate a library school in another country? Such information and much more can be found in this guide.

This text is the result of a project instituted in 1977 by the International Federation of Library Associations and Institutions (IFLA)—Section on Library Schools and Other Training Aspects. The project, "Equivalence and Reciprocity of Qualifications," was a response to a request for an international reference source whose use would result in greater professional mobility and international cooperation among library schools, libraries, and information centers. The project's objectives were fourfold: 1) to collect data for determining criteria for the interpretation of professional qualifications world-wide, 2) to provide a basis for comparison and international recognition of professional qualifications, 3) to enable mobility of librarians and information specialists across national boundaries and thus facilitate professional exchange and cooperation, and 4) to prepare an international reference guide to professional education and training programs world-wide.

The information in this guide was collected by means of a questionnaire distributed in English, French, Spanish, and Russian. Area coordinators helped in the design and distribution of the questionnaire. They also checked the returned questionnaires and prepared standardized entries for each institution that responded. Some questionnaire information was supplemented by available literature and personal contact with the institution. These methods also were used to obtain information on some of the non-respondents.

A total of 526 schools is included in the guide. These schools were all in existence between 1979 and 1983 when the data were collected. The programs of the schools cover the various information fields: library science, information science, documentation, and archives. Emphasis is on programs at the tertiary level of education unless the situation within a country varies from this pattern.

The guide is arranged alphabetically by country. At the beginning of the section for each country is a chart showing the educational levels (primary, secondary, tertiary, and post-tertiary), defining each level, and indicating the number of years it takes to complete each level. It would have been helpful to have a small map showing the locations of the schools within the country. The chart is followed by the individual entries for in-

stitutions offering library and information science programs. These are arranged alphabetically by location of the school within the country. When there is more than one school at a specific location, they are arranged alphabetically by name of the institution. Schools in the USSR are an exception. A common profile is given for all USSR schools and the addresses of the schools are listed under the type of school: institutions offering higher vocational courses, institutes of culture, universities, pedagogical institutes, and art institutes.

The profiles for the individual schools include the following: name, address, name of the person in charge, year founded, administrative structure, source of financial support, program, teaching staff, physical resources, continuing education programs, and professional status. Not every profile contains all of this information but as much as was reported on the questionnaire and found from other sources. The information provided under the program category includes entrance requirements, duration (length of study), scheduled hours, requirements for completion, name of final award or degree, objectives and contents of the program, number of students, and language of instruction. Names of faculty are not included under the category for faculty. Rather one finds the number of full-time and part-time faculty; degrees held by the faculty; percentage of time spent on teaching, research and other professional activities; and number of monographs and refereed articles published in the last three years.

At the end of the profiles for the schools additional information is found. This includes a list of countries (74) without evidence of established library and information science education, a selected bibliography, an index of place names, and a copy of the questionnaire which was used to collect the information. These are followed by a list of the monographs published in the IFLA Publications series.

For the first time one will be able to evaluate and compare the qualifications of librarians and information specialists educated in other countries. Naturally this will be very useful to library and information science educators, but also should be useful to librarians in large multinational corporations who must staff libraries and information centers across national boundaries.

Dr. Lucille M. Wert
Prof. of Library Administration
University of Illinois

Organizing Information: Principles of Data Base and Retrieval Systems, by Dagobert Soergel. Orlando, Florida: Academic Press, 1985. 450 p. ISBN 0-12-654260-0. \$51.50.

Organizing Information: Principles of Data Base and Retrieval Systems is an exhaustive study of the design, operation, and analysis of information systems. This book particularly emphasizes manual as well as computerized information storage and retrieval (ISAR). While *Organizing Information* is intended for use in an introductory information science course, it may also be suitable for independent professional development. A supplementary workbook with exercises is in preparation.

Information storage and retrieval is complex and can be confusing for even the most experienced library/information science professional. However, the extremely technical treatment of this subject does not promote greater understanding. *Organizing Information* is rich in content, but is so detailed that one can quickly lose interest in the material. It is a somewhat difficult book to read.

Organizing Information is divided into five major sections: Part I, "The Systems Approach to Information," covers the nature of information, networks, and the general structure of information systems; part II discusses systems design and analysis; parts III-V focus on data structures, the function of index language, and ISAR systems operation and design, respectively.

An extensive index is provided, as well as a complete two-part bibliography. Part 1 lists sources on various aspects of computerized information systems, online searching, and information storage and retrieval: textbooks, handbooks, readers, and journals. Reviews of available textbooks are included. Part 2 is a compilation of current readings, which corresponds to the chapters with brief comments by the author.

Several other features of *Organizing Information* should be noted. It is well organized and follows an elaborate outline with many headings and subheadings. Its numerous figures and illustrations are clear and complement the text. However, the excessive use of italics can be distracting to the reader.

I hesitate to recommend *Organizing Information* as an addition to all collections. Since it is so detailed and technical, it may be inappropriate for all but the most skilled library/information science professional or others with expertise in computers. However, for these individuals, *Organizing Information* can be a useful text on information storage and re-

trieval. Libraries with extensive involvement in ISAR systems may also consider purchasing this book.

Sara Anne Hook
School of Dentistry
Indiana University
Indianapolis, Indiana

Selection of Library Materials in Humanities, Social Sciences and Sciences, ed. by Patricia A. McLung *et al.* Chicago: American Library Association, 1985. 408 p. ISBN 0-8389-3305-x. \$49.00.

One of the major responsibilities of library managers is to guide the selection of books, monographs, and journal literature for the libraries they direct. The editors of this book have selected a series of essays covering the range of disciplines indicated in the title. These essays are not only instructional but are also fascinating to read.

A common thread weaves the essays together. As a rule, all of the selection sources for the librarian fall into the following areas: library professional sources and tools for bibliographic control; publishing industry media, such as *Weekly Record* and *Publisher's Weekly*; and sources related to scholarship in the various disciplines. The acquisition librarian will tap all of these categories to identify and evaluate newly published materials. This book also includes essays dealing with scholarly review journals, conference proceedings, *festschriften*, current bibliography selections, and published papers from research institutes containing information often not available elsewhere.

Some of the disciplines covered are English and American literature, history, philosophy and religion, art and architectural history, music, psychology, science and technology, and machine-readable data files. Agriculture, engineering, and medicine are not included but will be covered in a later volume.

One of the major problems facing many librarians is buying out-of-print books. An excellent essay on this subject by William Z. Schenck is included. Data on the services of out-of-print jobbers will be valuable to many of us. *THE LIBRARY BOOKSELLER*, a bimonthly trade periodical, is described as a source for out-of-print publications.

Marcia Tuttle has written a penetrating essay on serials and explains how serials differ from monographs. She devotes a portion of her essay to serial vendors. Government pub-

lications receive careful attention in an essay by Judy Horn. Government agencies probably produce more data than all U.S. publishers combined and therefore make acquisition more complex. Ms. Horn's essay reveals the basic elements in selection, evaluation, and acquisition of materials published by the U.S. government, state governments, international governmental organizations, foreign governments, and local governments.

Many special libraries are resorting to microfilms/microfiche as a space saver. A carefully written essay by Sara Eichorn illuminates for the reader the advantages and pitfalls of selecting microforms to build the library collection. One of the major problems in the open literature using microforms is providing indexes, guides, and cataloging records which may require a higher level of skill and entails an additional expense that some micropublishing firms are unwilling or unable to undertake.

In the field of nonprint media, Allan C. Rough describes the significant exceptions that must be recognized and learned if audiovisual librarians intend to develop and build their collections successfully. Some of the key problems facing the audiovisual librarian are the various formats available for selection. In the audio format area are audiocassettes, eight-track cartridges, open-reel tapes, phonodiscs, and compact digital discs (CDs).

One definite criticism of an otherwise excellent text is the omission of suggestions that library users and clientele have in adding to the collection. From this reviewer's experience, suggestions to add or even delete book/journal selections have been encouraged and proven to be of value.

Larry Chasen
General Electric Co.
Space Systems Division Library
King of Prussia, Pa.

Teaching Library Skills for Academic Credit, by Mignon S. Adams and Jacquelyn M. Morris. Phoenix: Oryx Press, 1985. 211p. ISBN 0-89774-138-2. \$29.50.

If there were a special god or saint of bibliographic instruction, the most devout worshippers would be those hardy souls teaching library courses for academic credit. Not only do these librarians have to cope with the usual demands of classroom duty, but they must first overcome numerous political, financial, and time restraints just to have the oppor-

tunity to teach an "official" course. In lieu of a temple, such determined library instructors can find help in this handbook, which provides sound, practical, and tested advice on library classes for credit.

The book begins by discussing the rationale and establishment of the library credit course. The sections on planning are unusually succinct and practical; other library instruction authors often get sidetracked with murky explanations of how to set goals and objectives, which only serve to turn off the reader. Strategies for coping with library and campus politics emphasize the need for a wide base of support, as the authors urge, "give credit to all the people you can." (p. 25) The following chapters address course assignments, audiovisual materials, teaching methods, and evaluation techniques. The book is well organized, divided into numerous short sections that are readable as well as accessible to librarians with specific concerns. The suggested readings and annotated bibliography are not comprehensive but cover notable material, mostly dated from 1970 to 1984.

Overall, all the information needed to start up a library course is here in one place—including all the problems and pitfalls, which seem to imply that one shouldn't bother! However, 18 real-life case studies in part II give evidence and encouragement to librarians "willing to devote extra time and energy to developing and teaching a course because of the very real benefits they receive from doing so." (p. 5) A "must" for these professionals, the book contains helpful hints for any teaching librarian (see the Boolean logic analogy, p. 63, and the strategy for teaching citation indexes, p. 69). Following the guidance of these knowledgeable authors will surely appease the classroom gods.

Catherine Suyak Alloway
Coordinator, Public Services
Harris-Stowe State Teachers College
St. Louis, Missouri

Using Government Publications, Volume I: Searching by Subjects and Agencies, by Jean L. Sears and Marilyn K. Moody. Phoenix, Arizona: Oryx Press, 1985. 216 p. \$67.50.

This publication furnishes the reader with a basic reference tool for using U.S. Government documents. With so many special libraries now having on-line access, the search strategies developed by the authors are an excellent supplement to such databases as DIALOG, SDC, and BRS. The authors have designed search strategies into five main portions: known item, subject, agency, statistical, and special techniques. This volume covers only subject and agency searches. Volume 2 will pertain to statistical searches and special techniques.

Each chapter of the book is self-contained and, in addition to covering sources on the topic, also informs the reader of relevant indexes, databases, as well as other related materials to consult for more definite and special types of materials. Chapter 2, a key chapter, discusses the research process needed to locate information in government documents. One chapter is devoted to the Superintendent of Documents classification system used throughout the book. Since most of our special libraries and SLA members have, or will have, needs for publications generated by the Superintendent of Documents, this type of information makes this book valuable in learning the mechanics and operations of the Government Printing Office.

Subject areas covered by this scholarly work include: foreign policy, foreign countries, occupations, selling to the government, business aids, directories, tax information, health, government programs and grants, and regulations and administrative actions. This is only a partial listing of subjects which are included in this volume. The index, compiled by Fred Ramey, is well structured and cross-referenced. The authors have taken great care to provide the reader with a great deal of bibliographic entries at the end of each chapter. The well-written chapter dealing with the database on GPO Sales Publications Reference File is well worth the cost of the book. With the publication of Volume 2 in April, librarians have another key to access the world's largest publisher, the U.S. Government.

Larry Chasen
General Electric Company
Space Systems Division Library
King of Prussia, Pa.

Information for Contributors

General Information

Special Libraries publishes material on new and developing areas of librarianship and information technology. Informative papers on the administration, organization and operation of special libraries and information centers and reports of research in librarianship, documentation, education, and information science and technology are appropriate contributions.

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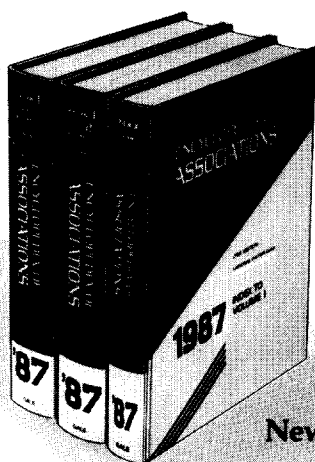
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