



Educating
Library and
Information Science
Professionals
for a
New Century:
The **KALIPER** Report

Executive Summary

July 2000

KALIPER Advisory Committee
Association for Library and Information Science Education (ALISE)
Reston, Virginia

KALIPER—the Kellogg–ALISE Information Professions and Education Renewal project—is the most extensive examination of the library and information science (LIS) curriculum since the 1923 Williamson Report,¹ the field’s first examination of education for librarianship, which is credited with major changes in the education of librarians. In contrast to the Williamson Report’s negative conclusions about the state of library education at the beginning of the 20th century, the KALIPER scholars find a vibrant, dynamic, changing field that is undertaking an array of initiatives.²

THE W. K. KELLOGG FOUNDATION INVESTS IN THE FUTURE OF LIBRARY AND INFORMATION SCIENCE

The KALIPER project continues the W. K. Kellogg Foundation’s investment in library and information science educational reform. KALIPER builds on the foundation’s Human Resources for Information Systems Management (HRISM) initiative of the mid-1990s. HRISM funded innovations in selected LIS programs at Drexel University, Florida State University, the University of Illinois, University of Maryland, and University of Michigan.

Taken together, the HRISM-funded program innovations foreshadow all the trends found more generally in LIS programs five years later. These include

- development of broader frameworks for examining information problems,
- increased interdisciplinarity,
- stronger information technology infrastructure,
- more effective use of technology to support curricula,
- emergence of curricular innovations,
- more effective delivery of distance learning,
- greater flexibility in program delivery, and
- the emergence of a more user-centered curriculum.

KALIPER was ALISE's ground-breaking two-year project, conducted between 1998 and 2000 by a team of twenty scholars from thirteen programs in the U.S., Canada, and England.



A joint class, "Federal Information Policies," is held for Syracuse University LIS students in Washington, D.C., and Florida State University students (via videoconferencing).

KALIPER ADVISORY COMMITTEE

Joan C. Durrance, Professor, University of Michigan School of Information, Chair; Leigh Estabrook, Dean, Graduate School of Library and Information Science, University of Illinois; Ray von Dran, Dean, School of Information Studies, Syracuse University; Joanne Marshall, Dean, School of Information and Library Science, University of North Carolina at Chapel Hill; Tom Childers, Professor, College of Information Science and Technology, Drexel University; Toni Carbo, Dean, School of Information Sciences, University of Pittsburgh; Shirley Fitzgibbons, Associate Professor, School of Library Information Science, University of Indiana (*ex officio*, ALISE President); Karen Pettigrew, Assistant Professor, The Information School, University of Washington; and Sharon J. Rogers, Executive Director, ALISE.

KALIPER SCHOLARS

The following competitively chosen teams of KALIPER Scholars conducted this study:

Scholar Team 1: John Richardson, Professor, Department of Library and Information Science, University of California, Los Angeles; Matthew Saxton, Ph.D. student, UCLA; Stuart Sutton, Associate Professor, The Information School, University of Washington; and Bill Gibbons, Ph.D. student, Syracuse University.

Scholar Team 2: Jane Robbins, Dean and Professor, School of Library and Information Studies, Florida State University; Beth Logan, Associate Professor, Florida State University; Prudence Dalrymple, Dean, Graduate School of Library and Information Science, Dominican University; and Heidi Julien, Assistant Professor, School of Library and Information Studies, Dalhousie University.

Scholar Team 3: Richard Cox, Associate Professor, School of Information Sciences, University of Pittsburgh; Beth Yakel, Assistant Professor, Pittsburgh; Jeanette Bastian, Ph.D. student, Pittsburgh; and David Wallace, Assistant Professor, School of Information, University of Michigan.

Scholar Team 4: Daniel Callison, Associate Professor, School of Library Information Science, University of Indiana; Carol Tilley, Ph.D. student, Indiana; Louise Robbins, Director and Associate Professor, School of Library and Information Studies, University of Wisconsin–Madison; and Pat Lawton, Ph.D. student, University of Wisconsin–Madison.

Scholar Team 5: Thomas Wilson, Professor, Department of Information Studies, University of Sheffield; Roma Harris, Vice Provost, University of Western Ontario, and Professor, Graduate School of Library and Information Science, Western Ontario; Joanne Marshall, Dean, School of Information and Library Science, University of North Carolina at Chapel Hill; and Victoria Marshall, Ph.D. student, Western Ontario.

METHODOLOGY

The purpose of the KALIPER project was to analyze the nature and extent of major curricular change in LIS education. Multiple methods were used to collect data, including surveys, case studies, content analysis, and interviews. To verify all data collected, additional interviews were conducted with selected faculty members.

The case-study schools and programs included the five schools originally funded by the W. K. Kellogg Foundation—Drexel University, Florida State University, the University of Illinois, University of Maryland, and University of Michigan—as well as the following programs that volunteered to participate: the University of California–Berkeley, Catholic University of America, University of Iowa, University of Kentucky, Louisiana State University, University of Missouri–Columbia, University of North Carolina–Greensboro, North Carolina Central University, University of North Texas, University of Pittsburgh, University of Puerto Rico, Queens College, University of Rhode Island, Rutgers University, San Jose State University, Simmons College, University of South Carolina, University of South Florida, Syracuse University, University of Tennessee, University of Texas–Austin, and University of Wisconsin–Madison.

Each team studied a subset of schools and programs and used multiple methods to collect data. Their approaches included questionnaires or interviews with faculty and deans; site visits; analyses of school calendars; course syllabi and descriptions; analyses of annual reports, COA reports, and other self-study studies; and ALISE statistics.

Other data sources included analysis of curriculum change within such specific areas as archives and records management, school media, distance education, and undergraduate programs; analysis of LIS academic job announcements from 1990–1998 in the *ASIS Jobline* and *American Libraries*; and analysis of faculty specialization descriptors from ALISE directories.



Information School faculty at the University of Washington are engaged in a wide variety of research activities and projects.

DEFINING MOMENTS TIMELINE

At the ALISE 2000 conference, ALISE member institutions contributed to the LIS education “Defining Moments Timeline,” a decade-by-decade review of significant moments in their history and program development. The Defining Moments Timeline was displayed throughout the conference. A Web version of the timeline now appears on the ALISE Web site. The timeline records institutional changes such as launching a new curriculum or program, first use of distance education, changes associated with the arrival of a new dean or director, merger with another department, or school name or other changes.

Educating Library and Information Science Professionals

Six trends are shaping curricular change in library and information science programs.

TREND #1: In addition to libraries as institutions and library-specific operations, Library and Information Science (LIS) curricula are addressing broad-based information environments and information problems.

While educating students for future roles in library settings remains at the heart of many programs, there is little doubt that many schools are focusing on broad-based information environments that go beyond traditional library settings. The inherent transferability of skills applicable to

digital information, licensing and legal issues, ethics, and so on. Some traditional LIS courses such as cataloging and classification are being reframed to incorporate concepts with broader application, such as the use of metadata.

School and program name changes (dropping “Library”—the “L” word—and adding “Information”—the “I” word) reflect the conceptual broadening of the field, as do the words that schools and programs use to describe their programs to potential students and employers of graduates. Schools and programs recognize the broadening of the field by changing their market positioning, occasionally by employing public relations firms, to capture nascent opportunities for graduates in nontraditional settings and to meet new employers’ needs.

TREND #2: While LIS curricula continue to incorporate perspectives from other disciplines, a distinct core has taken shape that is predominantly user-centered.

The infusion of multidisciplinary perspectives into LIS curricula results naturally as LIS faculty conduct research with or hire faculty from cognate fields and when they offer joint programs/courses or team teach with faculty from other departments. A survey across school curricula reveals that many perspectives from different fields are incorporated. Faculties are growing increasingly multidisciplinary, especially through joint appointments, and this development has a significant impact on curriculum development.

The LIS core is consolidating and clearly delineating what makes LIS distinct—as a knowledge domain—from other disciplines. But what is this core?

Based on the examination of mission statements, course titles, descriptions, and syllabi, LIS schools and programs proclaim that their domain includes cognitive and social aspects of how information and information systems are created, organized, managed, filtered, routed, retrieved, accessed, used, evaluated, and disseminated.



The Community Connector at the University of Michigan's School of Information supports community-serving organizations, funders, academics, and students who are using technology to enhance geographic communities. SI students maintain the Web site and contribute content.

library environments to other situations and information problems has become more explicit. More courses focus on examining information problems across environments. Courses are developed to examine the creation and marketing of information products, organizing and managing

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Users—whether as individuals, groups, or communities—are at the heart of these activities and questions. While employing a user-centered perspective has been a hallmark of some schools' and programs' curricula for a long time, there is little doubt that “user-centeredness” infuses most of the research and teaching in LIS.

The emphasis on users is included in school mission and vision statements. Even system-centered courses, such as cataloging and data management, increasingly incorporate the user paradigm.

Core curriculum revisions incorporate instruction in information-seeking in varying degrees of granularity, ranging from the cognitive issues of information-seeking and use to the broad-based role of information in society. The predominant focus on users is one perspective that makes the LIS field distinct from other fields that claim a role in information systems.



A University of North Carolina at Chapel Hill School of Library and Information Science professor works with doctoral students in the school's Interaction Design Laboratory, a center designed to facilitate research and development in electronic information environments.



An instructor at the College of Information Science at Drexel University discusses the college's new Web site with students.

TREND #3: LIS schools and programs are increasing the investment and infusion of information technology into their curricula.

Information technology underlies all aspects of the curriculum. The programs bear the responsibility for keeping their students on the cutting edge of existing and new technologies as they become available.

These investments require not only the purchase of new computers but also the need to reconfigure existing space or capture new space to create computer laboratories. Students use these labs to gain facility in learning a variety of software applications, online searching, Web design, integrated media production, creation of database applications, computer-supported collaboration, and usability testing. Students learn to increase access to knowledge across formats and create knowledge resources in multiple formats. These facilities require staff with the skill to maintain servers that offer a wide array of software.

A program's information infrastructure enhances the learning experiences for on-site students and may also be instrumental in the creation and delivery of courses accessed remotely. In many instances, the parent institutions of LIS schools and programs are eager to have flagship information technology systems that lead in teaching and research on the electronic frontier.

TREND #4: LIS schools and programs are experimenting with the structure of specialization within the curriculum.

Many LIS schools and programs offer students formal certificates and specializations, such as school media, medical librarianship, archives, or law librarianship. However, some schools and programs are rethinking the number and types of specializations offered and are looking toward providing simpler, more flexible options. Others are streamlining their curricula to offer fewer electives and concentrations to reduce both logistical problems for students and a perceived fragmentation of the curriculum.

KALIPER Scholars identified programs that are experimenting with flexible programming to provide students with the opportunity to customize



Students at work at the Telecommunications Lab in the School of Information Science at the University of Pittsburgh.

their curricula according to their own specific interests. Increasingly, LIS programs offer dual-degree options with other schools in their academic institutions. These changes are consistent with the trend toward framing curricula more broadly.

As part of preparing students for some specializations, schools and programs may impose entry requirements such as work experience in industry or require students to complete practical engagements or compile graduation portfolios that describe field experiences during their programs. Other requirements include successfully completing internships, co-op programs, or independent studies.

TREND #5: LIS schools and programs are offering instruction in different formats to provide students with more flexibility.

Investment in distance-education delivery is creating instructional formats that have application both on and off campus. Students have more choices than ever regarding course length, day and time of course offering, and on- or off-campus meetings. Distance education via the World Wide Web, often combined with on-site residency requirements, is increasingly available.

Other emerging forms of instruction include interuniversity partnerships, where students from one institution may take courses for credit from other LIS schools or programs, as well as collaborations with universities in other countries.

TREND #6: LIS schools and programs are expanding their curricula by offering related degrees at the undergraduate, master's, and doctoral levels.

The liveliest developments are in the undergraduate arena. Undergraduate minors and majors in a variety of formats are delivered with such titles as information systems, information management, and information studies. Programs with undergraduate components are experiencing large increases in enrollment.

At the master's level, several schools and programs offer multiple degrees. Others have new master's degrees in the planning stages.

New continuing-education programs, workshops, and other alternative programs have enabled schools and programs to tap into expanded markets and provide another potential source of revenue. Several schools and programs reported an increase in the number of cross-listed or "service" courses.

The alliances forged with other departments include traditional partners, such as education, with which many LIS schools and programs cooperate, to capture the school library certification market. The number of cross-listed courses with new disciplines is increasing.

Factors Affecting Change

KALIPER scholars sought to identify the forces that motivate curricular change and affect its direction. There is evidence that the factors that promote change may, in some situations, be the same ones that inhibit it. Some of these factors are

- demands of students, employers, graduates, and professional associations for graduate competencies;
- growth and expense of supporting emerging technology;
- internal campus relationships and positioning;
- availability and/or presence of faculty with new subject expertise;
- competition from other LIS programs; and
- availability of financial support for innovation.

Ultimately, the financial rewards that can be gained by expanding programs to different levels and by offering distance education promote curricular change.



University of Illinois graduate students brainstorm on a library and information science project.

The Future

Library and information science programs prepare information professionals not only for libraries—which continue to undergo major changes—but also for a number of other information environments. The renewal in LIS education, already under way, will continue with a new generation of faculty and students.

A professor at Indiana University's School of Library and Information Science teaches courses via distance-learning technologies to students statewide.



To meet these challenges, faculty at all levels must be supported in their research into changing information environments, societal access to information, and the uses of information. Library and information science's commitment to ethics and values, user-centeredness, and focus on access must be sustained.

The challenges of the next decade are apparent. The consensus is that the trends identified in this report in curriculum content and delivery will continue. Infrastructure investments must stay abreast of changing technology. Recruiting doctoral students and developing new faculty who share the vision for the changes identified in LIS curricula is essential.

Notes:

¹ Williamson, Charles Clarence. (1971). The Williamson Reports of 1921 and 1923, including "Training for Library Work" (1921) and "Training For Library Service" (1923). Metuchen, NJ: Scarecrow Press.

² Full information on the findings of the KALIPER project appears in the following publications: Joan C. Durrance and Karen Pettigrew. "KALIPER: A Look at Library and Information Science Education at the Turn of the New Century." 1999 *Bowker Annual*. N.Y.: R. R. Bowker, 1999, pp. 266–81; and Karen Pettigrew and Joan C. Durrance. "KALIPER Study Identifies Trends in Library and Information Science Education." 2000 *Bowker Annual*. N.Y. (forthcoming). Preliminary reports and the final report to the W. K. Kellogg Foundation appear on the ALISE Web site at www.alise.org— select KALIPER. The findings from the studies of archives and records management, school media, distance-education programs, undergraduate programs, academic job announcements, and faculty specialization areas will be made available in other formats, including an upcoming issue of the ALISE quarterly journal, *Journal of Education in Library Information Science* (JELIS). Check the ALISE Web site for locations.