With this issue, the *Journal of Academic Librarianship* begins a celebration of its 25th anniversary with a series of specially commissioned retrospective articles. Richard Dougherty reviews *JAL's* successes in meeting their stated challenges in a lead article entitled "Reflections on 25 Years of JAL and Academic Libraries." The founding editors, Richard Dougherty and William Webb's, inaugural editorial in March 1975 was titled "Uncertain Times." In it, they outlined four problems then facing librarians: "Supply and demand for new library school graduates," "Library assistants and technicians," "Affirmative action," and "Steady-state budgets." They offered the *Journal of Academic Librarianship* as a forum "To dialog," "To critique," "To envision," and "To hope."

This editorial is called "Certain Times' because directions around several key challenges seem fixed, although the details continue to be extraordinarily troubling and will occupy librarian energies for the next 25 years or longer. Technology will bring change and change will require librarians to adapt to new approaches. This maxim is discussed around themes of the academic enterprise, computer developments, scholarly communications, and talent maximization. Libraries have served learning well in the paper environment and will in the digital environment also.

ACADEMIC ENTERPRISE

The academy, the home and raison d'etre, of academic libraries is itself undergoing profound changes. Traditional age students, who were raised on *Sesame Street* and *MTV*, approach the problem of meeting their information needs differently from students of earlier generations. Librarians ignore their demands for glitzy, interactive service at our peril, and returning adult students are even more demanding customers. While many academics reject the idea of students as customers, more and more librarians are beginning to see the wisdom of a focus on customer-defined quality.

A college education is now a marketplace commodity with a new distance education product likely to gain rapidly in market share. Many current leaders in this marketplace offer scant library service, but as the Stanfords, Penn States, and Carnegie Mellons enter the field, new approaches to meeting the needs of these students must be designed and implemented. Assessment of satisfaction with the process of finding, screening, and using information to promote learning must be a priority.

COMPUTER DEVELOPMENTS

Dougherty and Webb identified steady state budgets as a problem confronting the profession 25 years ago. Since that declaration, double digit inflation has increased the price of serials about 600% at science and technology institutions and funding for computers has gone from zero to about 15% of a typical academic libraries' operating budget (funds available after personnel costs and materials budgets have been subtracted). The latter is a permanent reallocation of funds. Moore's law that the processing power of a computer chip gets twice as powerful every 18 months, while its price stays the same requires a continuing scramble by libraries' to keep current technology available to students, faculty, and staff. Computer prognosticators believe this phenomenon will continue for another 20 years and possibly indefinitely.

Computers and the World Wide Web (Web) have not just changed libraries; they have also changed lives. While many information needs (product information, travel, entertainment) can be met there most satisfactorily, academic resources continue to be scarce. In the long term, academia will have to provide access to its resources, too. Meanwhile information glut has replaced information scarcity as an obstacle to learning. The challenge now is to direct faculty and student attention to the best resources. While information can and will continue to expand, time to think will not. Artificial intelligence agents will aid humans in focusing their attention and will enhance their abilities to organize and understand information that interests them. And, librarians, in partnership with computer scientists, need to begin to design those systems. Steady circulation and reference desk activity combined with 75% remote use of resources have prompted Carnegie Mellon University Libraries and School of Computer Science to start designing an Automated Reference Assistant.
SCHOLARLY COMMUNICATIONS

In editorial after editorial and article after article, librarians have bewailed the situation where rising prices continue to reduce the local availability of journals. Faculties are generally unhappy about the disappearance of journals they publish in and browse from the library shelves, but as yet, few are willing to undertake the transformation to a process of accepting refereeing and Web publication as a substitute for print publication.

This solution does work. At a recent Digital Library Federation meeting, Michael Kurtz of the Harvard-Smithsonian Center for Astrophysics described the Astrophysics Data System. Through it, astrophysicists manage their total scholarly communications system—all know how to use the comprehensive database, all can read on the screen or print any article of interest, and all can link to supporting online data resources in France. Kurtz attributed success of this venture to the discipline's size, its lack of commercial applications, scholarly society ownership of the articles, the vision of key individuals, and some national funding. This discipline brought the entire discipline library to every researcher's desktop. Kurtz estimates that faculty productivity has increased by 3-5%, allowing the discipline to progress more dynamically.

All the technologies are available to facilitate this transformation, but the social systems are lagging behind. Dougherty predicts that a generational change will be necessary to effect a new system, but perhaps the other pressures on the academy itself will allow this change to occur more rapidly. Librarians should continue to teach, preach, cajole, and assist faculty in achieving this new vision of scholarly communications so that learning can be enhanced and improved across all disciplines.

TALENT MAXIMIZATION

Three of Dougherty's four problems revolve around the libraries' human resources; people have been and always will be our most important asset. Recruiting individuals to the profession, the blurring of responsibilities among librarians, staff, and technologists, and affirmative action continue to require creative attention. In each of these areas, some progress has been made, and JAL, College & Research Libraries, and other library journals can take some credit for publishing many, many articles that have contributed to rising sensibilities on these issues. More good work is needed.

Perhaps the most important challenge is to create an atmosphere in which talented individuals can embrace change. Hiring individuals who are flexible and who accept the transitory nature of their job descriptions is essential. Helping long-term employees to comprehend that their beloved routine work begun in 1975 no longer contributes to the organization is difficult but necessary. Understanding the big picture and being able to map that to the local situation are techniques that assist individuals to flourish in an environment of change.

The Journal of Academic Librarianship will itself be transformed at some juncture during the next 25 years. The need to continue to share good ideas and best practices will remain, but the delivery mechanisms will not. Evolving academic communities, computer developments, scholarly communications changes, and talent maximization are certain to be a part of the future of libraries. Amid these many certain challenges, librarians must ensure that learning continues to be enriched by intelligent and efficient use of information.—Gloriana St. Clair