

AD HOC COMMITTEE ON LIBRARIES FACILITIES MASTER PLAN

APPENDIX C

**AD-HOC COMMITTEE FOR LIBRARIES FACILITIES MASTER PLAN**

**SUB-COMMITTEE ON USERS**

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APRIL 4, 2000

**REPORT ON PROJECTED LIBRARIES' USERS AND USAGE FROM 2000 TO 2010**

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## I. SUMMARY & RECOMMENDATIONS

During the next decade users will expect the University Libraries to provide the fundamental resources and services it now provides: access to diverse, superior collections, expert reference advice and instruction, and efficient ancillary services, such as retrieval from remote locations, inter-library borrowing, photocopying and printing, and study space. Users will generally accept, and increasingly expect, that the majority of library functions will be provided “on-line,” and will be accessible from on-site and remote computers. Users will access not only on-line finding tools, such as catalogues, indices and reference services, but also full-text digitalized primary sources in contemporary collections, databases, and course materials. Many users, particularly in the arts and humanities, will continue to need efficient access to primary sources in print collections that for technical or financial reasons will not be available in digital format. While some users, particularly in high technology fields and the health sciences, may function in an exclusively digital research environment, many users will require a dual research environment where some resources are digitalized and some remain in print.

Trends indicated that the number of users is likely to increase in all categories, both affiliated (faculty, student and staff) and non-affiliated (WWAMI regional users, businesses and the general public). Their needs and sophistication are, and will continue to be, incredibly diverse. The greatest percentage increase in affiliated users will occur at branch campuses and in distance-learning programs. While projections for the coming decade point to relatively high rates of growth in technology-based and health science disciplines, there will be smaller, but marked increases in student interest in classics and fine arts. The implications for Libraries’ collections are similarly disparate, requiring up-to-the-minute databases of cutting-edge research and maintenance of historical print collections. Regardless of discipline, the proliferation of “information” in searchable databases will likely increase most users’ need for the particular skills of librarians in organizing information and making it accessible. Interestingly, although users’ ability to access the Libraries from remote locations has improved dramatically in the 1990s, the Libraries have reported not a decrease, but an increase, of on-site visits.

Users not only use collections but also, in varying degrees dependent on discipline, drive collection growth. Increased numbers of diverse users, again particularly affiliated users, will exert continuing pressure for collection growth, both in “mainstream” topics and in specialized or emerging disciplines, the latter being important attributes of a thriving research university. Where collection growth is driven by funded research, it may be appropriate for Libraries’ funding to be an explicit component of the funding request.

The Libraries’ survey data amply support the common-sense view that users place paramount value on the quality of the Libraries’ collections, followed closely by the value placed on skilled reference services. It seems clear that users’ best interests are served by dedication to those two values. To the extent that constraints on capital expenditures for construction preclude on-campus storage of tangible collections, users

would be better served by construction of remote storage, if less costly both to build and operate, than by diminution of collections. Technology that would permit a version of “browsing” among related titles is being developed and will help to mitigate the loss of open stacks. To the extent that constraints on operating budgets preclude desirable acquisitions, users would also be better served by collective regional, and perhaps national or global, institutional commitments to develop, maintain and share collections than by diminution or loss of particular collections.<sup>1</sup> While current users accustomed to on-campus open stacks will perceive a diminution in service, the inconvenience of waiting for a book to be delivered is minor in comparison to the public good in maintaining high quality collections.

Users, particularly students, will continue to need substantial amounts of on-campus space for access to reference services, instruction in research skills and information literacy, and access to state-of-the-art work stations. Students, both graduate and undergraduate, also need substantial space for solo and, increasingly, group study. Those spaces need to be configured so as to permit students’ ready access to the latest information technologies. To the extent that part of the University’s mission is to provide equal access to information for those unable to afford the latest technologies, these “wired” spaces are essential.

Finally, as the Libraries’ collections and services become increasingly “virtual” and thus accessible from remote locations, remote users, perhaps particularly distance learners and the unaffiliated public, may be less aware that they are, in fact, using the University Libraries and may be unaware of the Libraries’ costs of licensing on-line databases. The University will need to engage with the public and with the Legislature to educate the public about the collections and services the Libraries provides and to ensure appropriate levels of funding for those services.

## **II. Methodology**

Using a combination of historical usage patterns from Libraries surveys and University projections of enrollment trends and disciplinary developments, the report estimates for the next decade the number of users the Libraries may expect, identifies categories of users and their characteristic usage patterns, and predicts significant shifts in the relative numbers of users in given categories and/or shifts in usage patterns. Our principal technique has been to correlate numbers of users in each category with user surveys conducted by the Libraries in 1992, 1995 and 1998. That quantitative analysis has been supplemented by narrative perspectives, particularly from librarians.

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<sup>1</sup> The reasons for the spiraling upward costs of acquisitions are complex and beyond the scope of this project. Separately, however, the University and the Libraries have begun to work to reverse one contributing factor – the transfer of copyright in scholarly work to private publishers. A related factor is the relative concentration in the publishing industry that makes price negotiation difficult. Finally, pricing issues are particularly complex as both industry and libraries attempt to assess the varying markets for and utility of print and digital formats for given collections.

The University projects increases in numbers of users in all major categories: “traditional” undergraduate and graduate students at Seattle, Bothell and Tacoma, certificate, evening and distance students, faculty and staff, non-affiliated in-state users, and remote inter-library loan users. The Libraries’ user surveys support some broad generalizations about principal uses among these categories and about shifts in use within given categories. For facilities planning, some of the most significant conclusions are that undergraduates increasingly use the Libraries, including computer labs, for group and solo work; and that while remote uses (affiliated or not) of Library databases have improved and increased dramatically in recent years, in-person visits to the Libraries have not decreased but increased during the same period.

Our best quantitative data pertain to student and faculty use. There, thanks to Libraries Use Surveys every three years since 1992, we can derive some correlations between use and enrollment.

### **III. Emerging Trends in Users and Uses**

#### **A. Overview**

Our students, faculty, and staff and their library expectations and needs are changing. The diversity we see now and expect to see in the future reflects changes in demographics, information technology, and an increasingly global and interdisciplinary world.<sup>2</sup>

The shifts in our student populations are reflected in the decline of the traditional college-age population; a concomitant increase in older, part-time, and adult learners; increased commitment to enrolling minority students; an increase in distributed and distance learners; and the influx of international students. These new students come to higher education with different experiences, motivations, learning styles, educational demands, time constraints, personal obligations, and financial situations.

The University's strategic goals of expanding outreach and public service also impact Libraries' services and facilities. The Libraries face the challenge of continuing to provide a high level of service to and sufficient facilities for our students, faculty, and staff, while providing resources and leadership for the University's goal to establish and expand partnerships with a broad range of educational, business, and community constituencies statewide.

Today's students represent the first generation raised in Alvin Toffler's electronic cottage, with its computers, VCRs, cell phones, modems, fax machines, gameboys, and walkmans. The accelerated change in the use and availability of technology has

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<sup>2</sup> A useful summary of the impact on libraries may be found at James J. Duderstadt, *Transforming the University to Serve the Digital Age* 21 – 32, CAUSE/EFFECT (Vol. 20, No. 4, Winter 1997-98), available at <http://www.cause.org/information-resources/ir-library/html/cem9745.htm>.

altered expectations of libraries. Unlike students of the past, most students today view information technologies as laborsaving devices—tools to be exploited rather than avoided.<sup>3</sup> Media and information technologies have converged, offering unprecedented opportunities for information storage, instruction, and creation. Multimedia systems support both active and personalized learning as well as nonlinear information retrieval. Information technology promises to engage students with their own learning in new and powerful ways.

The transformational influence of networked information, along with the resultant information overload, has changed how our users locate and use information and has made information literacy even more urgent. In library user surveys, students placed a high priority on instruction in the use of information resources. Not only do UW students value information literacy, but also they come prepared to take advantage of the instruction. In a survey conducted of UW students before they started school in the fall of 1998, 80% of the entering freshmen expected to have a computer in their residence. Ninety-percent had used a word processor at least weekly during the past year and 76% had used the Internet at least weekly. Eighty-three percent said they were comfortable using a computer and 67% said they were "very" or "extremely likely" to seek out opportunities to work with computers or on the Internet. We must not forget that although the majority of our students have good access to computers and experience using them, a minority does not. A recent report warns of a growing "digital divide" of technology haves and have-nots.<sup>4</sup> These students are in critical need of additional support. In addition, there is an often-awkward gap between the technology savvy and their "professional elders."

There is a growing emphasis on learning, as distinct from teaching, and on research about how and when we learn, both as individuals and in groups. Student-centered pedagogies are gradually becoming the norm and include such approaches as evidence-based learning, collaborative learning, problem-centered learning, experiential learning, and service learning. Visual literacy will be an important addition to learning, teaching, and research. These changes have direct implications for library services and how the Libraries configures its space.

Since World War II, we have experienced unprecedented growth in our knowledge base, spurred by the increase in government-funded research. The high rate of growth in the knowledge base will continue throughout a competitive global economy. The expanding knowledge base suggests the importance of educating students for flexibility and adaptability. The ability to think critically, reason, find and analyze changing information will be essential. Information and technology

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<sup>3</sup> See e.g., *Entering Student Survey, 1999: Methodology and Response Frequencies* (OEA Reports: University of Washington, 2000), available at <http://www.washington.edu/oea/0003.htm>.

<sup>4</sup> *Falling through the Net: Defining the Digital Divide: A Report on the Telecommunications and Information Technology Gap in America*. (Nationals Telecommunications and Information Administration, U.S. Department of Commerce: Washington, D.C. 1999)

literacy has emerged as core proficiency with the Libraries as a key educational leader in this area. The international character of the economy and of the problems we consider important are forces of change in higher education. The increasingly global nature of our concerns will challenge universities to create innovations in curriculum and research and libraries to provide facilities and services responsive to the increasingly interdisciplinary nature of research, service, and teaching.

## **B. Enrollment Increases**

Enrollment increases will shape the scale and scope of the Libraries in the future. Since 1995, the Libraries has considered enrollment increases to be a major transforming force for its services, collections, and facilities. The Libraries has focused on three major areas most directly tied to increases in student and faculty numbers: services, collections and facilities. Increased enrollment will impact all Libraries services - teaching and learning, reference and research consultation; circulation; reserves; and liaison work. Enrollment increases will have a direct impact on increased demand for books, journals, electronic resources, media, data sets, maps, and archival materials. And, more students, staff, and faculty will require that facilities accommodate increased need for study and collection space, network capacity, and computer workstations.

The Libraries will need its fair share of enrollment funds so that services and information resources are not diluted with the addition of more students and faculty. The budget impact of increased enrollment is significant in the areas of circulation operations; instruction, reference, and research services; technical services and facilities management; information resources and collections, and hours of service.

The Libraries recognizes that enrollment planning should not be focused only on the need for more resources. To this end, strategic planning processes include ongoing adjustments and strategies for enrollment changes. To address enrollment increases, the Libraries is facilitating user self-sufficiency; time-shifting demands and services; employing technology; and leveraging existing space and facilities.

The Libraries seeks to get ahead of the enrollment curve. For instance, the Libraries is building a digital library and delivering more information to the desktop with the goal of distributed access. The Libraries also evaluates renovation and remodeling plans within the context of enrollment increases. The three facility projects proposed in the Libraries Facilities Master Plan (the Suzzallo Library renovation and the creation of a Fine Arts Library and a Natural Sciences/Natural Resources Library) would provide additional library space for study and instruction with the ability to extend hours and services through the consolidation of libraries. In particular, the creation of a Natural Sciences/Natural Resources Library on the Southwest Campus would release space in the Allen Library for expansion of central library services.

### **C. Evening Degree and Summer Quarter**

The expansion of the Evening Degree programs and Summer Quarter enrollments has special ramifications for the Libraries. The Libraries services and hours respond primarily to daytime instruction. Library support for evening degree students comparable to that available to day students will require expanded access during evening hours and on weekends to library collections, services and staff. This translates into longer open hours and longer hours of service by librarians and other well-trained staff. The Libraries Summer Quarter hours and services are more limited than during other academic terms. In particular, many branch libraries are not open evenings and weekends. As the UW expands its academic day and year, enrolls more students, and hires additional faculty, the Libraries will require additional staff and operational support to provide comparable access, facilities, and service. While enrollment increases in these categories will affect services and operations, they do not impact facility considerations to the extent that increases of day students attending during the traditional academic year do.

### **D. Distance Learning**

The provision of efficient, high quality library services to distance learners is a key factor in fostering a successful educational outcome. As the University of Washington expands its distance learning courses and degree programs, the Libraries' goal is to increase support to these students and faculty. Library collections and services must provide for these users an equivalent level of support to that provided to on-site users. It must be emphasized that library services to distance learners require a greater level of mediation than occurs on campus and thus drives up the cost of providing those services. Distance learning students require easy, convenient, yet distributed access to reserve materials, traditional and electronic collections, networked information, staff expertise and research consultation, reference services, and information literacy instruction.

Key components of library services for distance learning include remote access to reserve materials and other course-related textual information in digital form; remote access to graphics, video and other multi-media materials; electronic vehicles for reference assistance, document delivery, interlibrary borrowing; and, increasingly, assistance in hardware and software connectivity. Likewise, distance learning faculty require specialized Libraries support in the development and preparation of courses to insure that their students can access the information resources needed to successfully complete the course.

Distance learning is a growing focus area for the health sciences programs. Family Medicine and other clerkships and residency programs are largely based outside the Seattle metropolitan area, and the Libraries receives frequent requests for consultations with UW faculty and students based at teaching sites throughout the WWAMI (Washington, Wyoming, Alaska, Montana and Idaho) region. The School of Social Work, among other health sciences programs, has developed a degree program to provide educational opportunities and clinical support services to place-bound students and under-served populations.

As distance learning is expanded in disciplines such as computer science and library and information science, the Libraries requires the resources and staff to provide equitable access and services to students and faculty no matter where the "classroom" may be. Because library resources for distance learning are predominantly electronic, the growth of this user base might not significantly impact traditional collection space but would require an adequate space for support services, including preparing materials to be electronically distributed and for providing on-line reference and instruction.

#### **IV. Student Use**

##### **A. Overview**

Under the University's commitment to take a "fair share," currently 52% of the state's new high school graduates, the administration projects the following enrollment targets:

- Seattle – a 4,684 FTE increase to 35,429 FTE (at .974 conversion to actual headcount);
- Bothell – a 5,785 FTE increase to 6,332 (at .732 conversion to headcount); and
- Tacoma – a 7,161 FTE increase to 18,254 (at .744 conversion to headcount).

If we assume use patterns reasonably comparable to those we have seen in the past five years, these enrollment predictions can generate rough estimates for facilities needs. For the past three biennia the Libraries has used a budget model to predict the impact of enrollment increases on circulation services, instruction, reference and liaison functions, staff support and equipment. With the possible exception of circulation services where the primary impact is felt in the student hourly budgets, the other impacts implicate facilities because they add either people or equipment. The Libraries estimate that every 271 new students require an additional librarian and a .50 FTE classified staff member. For every 100 new primary users one new public workstation is required. One new staff workstation is required for every new staff position.

##### **B. Undergraduate Students**

According to 1998 library user surveys, undergraduates continue to rely heavily on "library as place," with 70.3% of respondents visiting weekly or more often (an 11% increase over 1995). Remote use by campus or home computer is less prevalent among undergraduates than faculty or graduates; this may change as the percentage of undergraduates with home computer access increases. (Home computer use for library work increased almost 7% between 1995-1998.) Undergraduates perceive the libraries primarily as places to do work: 64.7% of the 1998 respondents visited the libraries weekly or more to work individually, 23.3% to work in groups.

Undergraduate priorities as reflected in the survey data also emphasize also emphasize the library as workspace rather than as repository of materials. Undergraduates, in general, placed a lower priority on collections than graduates or



faculty, and expressed a higher dependence upon library computers and electronic course reserves. Based on students' desire for increased library hours (41.9% of respondents), we may assume that use of computer facilities and workspace will continue to be a priority over access to physical collections. For undergraduates, there seems to be a shift towards a model of the library as a 24-hour study hall.

To assess undergraduate enrollment trends we looked at junior fall enrollment figures for 1993-1999. We made the assumption that data for juniors would give us the best indication of persistence and disciplinary trends, given that many students have not yet declared a major before junior year. The most significant growth on the Seattle campus has been in the College of Arts and Sciences, with general Arts and Sciences students

increasing by 35% over the 6-year period. Four of the divisions (Arts, Sciences, and Social Sciences) experienced growth between 2.5-3.7% during this time. Estimates from the Provost's office project high growth in "tech" fields with a smaller, but noticeable increase in fine arts and classics majors and course registrations. Enrollment in the School of Medicine (a professional school) has declined slightly very recently; this school has also experienced an overall growth of 13.2%, giving some indication of likely trends in health-science undergraduate majors. Enrollment patterns in other schools and colleges are level or decreasing slightly. It was difficult to interpret trends for those with fluctuating data (i.e. colleges of Ocean and Fishery Sciences and Forest Resources). Increased undergraduate enrollment in general can be expected to impact all of these disciplines on the Seattle campus and place more demands on the libraries as providers of study space.

The branch campuses have demonstrated remarkable growth over the period from 1993-1999, with undergraduate enrollment increasing by 17% at Bothell and 16.6% at Tacoma. A general assumption may be made that students at these campuses, like at Seattle, will be looking to their libraries for places to work on campus and to make use of library computers to remotely access Seattle collections.

### **C. Graduate and Professional Students**

Because of Graduate and Professional Students' "intermediate" status—still taking coursework, yet also embarking on independent or group research and teaching courses—the nature of the library use patterns of this group take on the characteristics of both undergraduates and faculty. This segment of the university population, which comprises roughly 27% of the total student population on the Seattle campus, may have special space needs as well. Often they lack adequate space devoted to their research needs, for example there are fewer large-scale projects like UWired geared specifically toward graduate students. Those without assistantships do not have alternative workspaces in the form of departmental offices and rely on the libraries to provide this space. Graduate assistants who share office space or work without an office also depend upon the presence of libraries as a place to do work.

## 1. Enrollment

As the section on undergraduate library use suggests, enrollment trends in graduate and professional programs will also impact library facilities according to the use patterns outlined above. There has been an overall increase in graduate and professional student enrollment of 1.1% over the 10-year period from 1989-1998; headcount has increased by 918 students over this period, from 7468 in 1989 to 8386 in 1998. Schools with increases in enrollment tend to be those offering professional degrees, although the upward enrollment trend is not restricted to professional programs. The schools of Business Administration, Law, Public Affairs and Public Health and Community Medicine have grown steadily over the last 10 years, with average annual percentage increases between 3% and 13%. In terms of headcount, the schools are accommodating between 30 and 150 more students than ten years ago for a total of 400 additional students. Increases are also found in interdisciplinary programs with average annual growth in Interdisciplinary and Interschool Programs ranging between 7-10%. Headcounts have doubled over the past ten years from 270 to 555 students. This growth demonstrates the overall trend toward interdisciplinarity that can be found in more traditional disciplinary programs. Schools showing a slight decrease include the divisions of Humanities, Sciences and Social Sciences, with an overall average decrease of 2.0% over the 10-year period. This slight enrollment decrease does not necessarily imply a corresponding decrease in library use due to the growth of interdisciplinary programs that may intersect with these fields.

## 2. Growth of Bothell and Tacoma:

Graduate and professional programs at Bothell and Tacoma have shown tremendous growth since 1992 with a 41.3% growth at Bothell and a 28.7% growth at Tacoma. Headcount has more than quadrupled since 1992, increasing from 59 to 272 students. Assuming a similar growth pattern for the next 10 years, there will be an increase in need for workspace for graduate and professional students at Bothell and Tacoma. Because of the prevalence of these programs being professional in nature (Business Administration, Education and Nursing), there may be more of a need for group workspace, in which students can access electronic resources and collection materials. Furthermore, enrollment increases at the branch campuses will place a higher demand on the interdependence of Libraries' services such as Resource Sharing Services and the development of full-text to computer accessibility.

## 3. In-Person Use

### a. A Disciplinary Analysis

Graduate and professional students show a high frequency of in-person library visits. According to the 1998 Library Use Surveys, an average of 77.7% of graduate students indicated visiting University Libraries weekly or more often. An analysis by school or college reveals disciplinary trends and the varying reliance on Libraries for academic needs. Schools demonstrating a high reliance on in-person use are Fine Arts with 100% of

respondents indicating in-person use on a weekly basis or more often; Social Work (93.4%); Social Sciences (91.2%); Nursing (88.9%); and Humanities (85.0%). Schools at the low end of this continuum still show significant use of library space: Education (52.6%); Sciences (64.3%); Ocean and Fisheries (66.7%); and Engineering (69.6%). Disciplinary characteristics such as a greater prevalence of field and lab work, or the increase in the availability of electronic materials for research contribute to a slightly less dependence upon in-person use of library resources. Because of the nature of some disciplines, there will still be a need to access the physical collections despite future increases in digital resources and remote access.

b. Type of use

Current patterns of types of use among graduate and professional students provide some indication of future trends for space needs at the main and branch libraries. At the university level, graduate and professional students visit the library mostly to find a journal or book (51.4%), use library computers (51.2%) or work individually (50.1%). Unlike undergraduates, they tend less to use the library for working in groups (10.5%). Figures by school or college illustrate the proportion of each of these uses and indicate that there is not a “typical” graduate student in terms of library use.

c. Making use of special collections

Graduate students, and increasingly undergraduate students due to pedagogical changes, use primary materials for their research. As a research library, the UW Libraries offers a range of nationally renowned special collections made up of unique primary materials. The Historical Photographs, Manuscripts, Pacific Northwest, and Architectural Drawings collections focus on the history and culture of the Pacific Northwest, including Alaska and Western Canada. Collection sources include members of Congress, regional photographers, pioneers and settler, and local Japanese, Jewish and Scandinavian communities. Another specialty is travel and exploration literature, particularly of the Pacific Ocean. The University Archives is responsible for records of UW office and student organizations, and personal papers of prominent faculty and administrators. The Book Arts Collection features both historical and modern pieces relating to all aspects of the physical book. Collections of authors spanning the 19<sup>th</sup> to 20<sup>th</sup> centuries include significant regional poets, and a major collection of 19<sup>th</sup> century American literature.

d. Working in the library

A high number of graduate students use library space to work individually. This may be attributed to a lack of appropriate workspace at the department level or elsewhere on campus. Students indicating the most

individual use (weekly or more often) hailed from Library and Information Sciences (75.0%); Fine Arts (70.6%); Social Sciences (65.0%); Medicine (66.7%); and Social Work and Humanities (62.5% each). Less need for individual workspace can be assumed for Ocean and Fisheries (26.6%); Engineering (30.5%) or Sciences (32.2%). As an exception to the university trend of graduate students' infrequent use of the libraries for group work, a significant number of respondents from Business (42.3%) and Library and Information Sciences (50.0%) do make use of the libraries for this purpose. There may be an increased need for group workspace with the addition and enrollment growth of professional degree programs.

e. Remote Use

The future of remote use of library materials in a digital format will not just depend on technology's potential and the availability of resources, but also on the computer resources available for students in departments and at home. The existence or lack of department computer labs, the quality of those labs, and their policies on printing (including who absorbs costs) will all affect students' ability to make use of developing library technologies from other locations on campus. Furthermore, while we may presume an increase in the number of students who have computer access at home, we cannot guarantee that the level of home technology will be sophisticated enough to accommodate the distribution of some electronic materials.

## V. UW Educational Outreach

**UW Educational Outreach Programs** include the UW Extension and the Accessible Degree Program and Summer Quarter. The latter two permit matriculated students to complete degrees, through evening and summer classes and through distance-learning formats. These students' library use has not been separately identified in use surveys.

UW Extension includes Certificate Programs, Distance Learning, English as a Second Language, and Academic Programs for Teachers. UW Extension primarily serves nontraditional, post-baccalaureate students. In 1997-98 the Extension had over 30,000 registrations (not headcount). In that year, on-site courses accounted for approximately 30% of registrations, ESL for 24%, Certificate Programs for 31%, and Distance Learning for 15%. These students' uses are not separately identified in Libraries' use surveys to date.

Currently, UWEO has about 35,000 registrations per year with a great variety of library usages among the registrants. UWEO expects to increase enrollment by 3,000 to 5,000 registrations per year, especially in distance learning classes. By 2010, UWEO could have 60,000 – 70,000 registrations per year.

Enrollment in the Evening/Distance Learning Degree Program increased by 72.35% from spring 1994 to spring 1998. Enrollment headcount increased from 474 in 1994 to 866 in 1999. Distance Learning Certificate Registrations (not enrollment headcount) have increased from 47 in 1993/4 to 1,568 in 1997/98. Although we do not have separate use data for students in these programs, Libraries' staff expect that they will rely heavily on remote access, electronic reserve, and attendant support services. They seem more likely to visit libraries in – person during evenings and weekends. This would suggest that the Libraries will need to add staff support to accommodate their needs, but would not necessarily need to add physical facilities except to house the staff.

## **VI. Faculty and Staff Use**

### **A. Faculty**

Faculty are relatively infrequent users of the Libraries for working space and they generally view current Libraries' hours as sufficient. Instead, faculty are heavy, often remote, users of the Libraries' electronic databases and print collections. Faculty across all academic disciplines consistently rate the Libraries as their most important source of information, over other libraries, the World Wide Web, department resources, personal files and colleagues. For example, on a scale of 1 to 5, where 5 meant that the Libraries were a very important source of information, the mean rating across all colleges and departments was 4.75.

Faculty are more likely to access the Libraries from a remote location rather than visit in person. For example, in 1998 71% of faculty accessed the libraries almost once per week through an office computer, and 37.6% did so from home. In contrast only 47 % of faculty visited a library in person slightly more often than once per month. The rate of in-person visits, however, is notably higher for faculty in the fine arts and humanities and for faculty in departments that have a branch library in the same building or very nearby. In general, faculty with nearby branch libraries does more in-person activities in the library, including finding journals and books, reviewing new material and using library computers.

In general, faculty in the humanities and social sciences showed frequent use through in person visits and remotely from office and home. Health science faculty showed very high office use, but much lower in-person and home use. Faculty in the sciences indicated relatively low use of libraries from home computers and relatively higher in-person use, particularly in departments with local branch libraries. In general for all disciplines, retrieving a journal is the most common reason for an in-person visit, followed by retrieving a book, and photocopying. Faculty in arts & sciences and architecture retrieve books somewhat more frequently than journals.

In general faculty rate post-1980 journals, books, the catalog and biblio-databases as the most important resources for their work. Pre-1980 journals and electronic journals follow close behind. Health science faculty, especially in medicine,

consider the post-1980 journals to be the basic resource they need. Other academic areas use a wider variety of resources, and there are noticeable variations across disciplines. For example, engineering faculty rate proceedings highly while fine arts rate manuscripts and multimedia highly.

All disciplines rated collection quality as their highest priority. In general, faculty also valued web-based access to bibliographic databases and preservation highly. Different disciplines have noticeably different priorities for delivering full-text and preservation of library materials. Health sciences, business, engineering and science faculty identified full-text as a very high priority, while faculty in architecture, fine arts and humanities ranked preservation significantly above full-text delivery.

The numbers of faculty can be expected to grow with enrollment increases. From 1992 to 1998, full-time academic appointments have increased from 4,567 to 5,365 (approximately 17% increase). Part-time academic appointments have grown from 4,154 to 4,568 (a 9% increase). The impact of faculty growth on collection size is not a simple calculus. For some new faculty in established disciplines, existing collections will require only maintenance. Other new faculty, who bring new research and teaching emphases, often require significant support through additional collections.

Finally, faculty teaching practices generate particular, and changing, patterns of student use. In some disciplines the focus, particularly in undergraduate education, is shifting from traditional classroom lecture to hands-on demonstrations of data access, interpretation and presentation. These new classroom activities require teaching spaces outfitted with appropriate technology and space for staff support for teaching and equipment maintenance. To date, many of these new teaching spaces have been located in the Libraries. In addition, students in such classes increasingly need access to comparable equipment to study.

## **B. Staff**

Staff also use the Libraries. In particular, staff hired on research grants may have particularly substantial and focused impacts on particular libraries. For example, since 1993 staff users have accounted for slightly more than ten percent of all users. Except for Health Sciences, staff are not separately identified in the Libraries' use surveys to date.

We can of course predict that staff will grow with enrollment increases and with funded research projects. From 1992 through 1998, full-time staff increased from 10,358 to 11,675 (an 11% increase); part-time and hourly staff (the two categories were separated in 1997) increased from 10,652 to 13,764 (a 23% increase.)

## **VII. Public Use**

### **A. Alumni, non-affiliated and general public users**

The Libraries are a public access facility with a commitment to provide information access and services to all citizens of the state. Washington State population is projected to continue a 20 percent growth rate per decade to approximately 6.6 million residents by 2010. The State's Office of Financial Management predicts over 800,000 births in the state during the next decade and a net migration into the state of about 420,000. To the extent that there is a substantial increase in the Puget Sound region, the Libraries can anticipate a proportionate increase in in-person visits remote uses by non-affiliated users.

The Libraries face increasing pressure from alumni and members of the general public for remote access to the Libraries' various databases. Many of these databases are currently licensed to the Libraries for use solely on-site and by affiliates who are authenticated. If the Libraries were to provide access for all citizens of the state, significant additional funding would be required for the requisite licenses and attendant support services and facilities.

The Libraries have conducted exit surveys of non-affiliated on-site users in 1993, 1996 and 1999. These surveys indicate that non-affiliated use, while growing in absolute numbers, is declining as a proportion of all use. In 1999, non-affiliated users comprised 5.3% of daytime users, 9.7% of evening users, and 21.7% of weekend users across all branches. Thus, non-affiliated use generally (with the possible exception of the Health Sciences Library) has not had a significant impact during times when the libraries have the highest number of total users.

Non-affiliated users have not changed their use patterns significantly except in a significant increase in the percentage using library computers. Nearly 60% report using library computers. Non-affiliated users tend to ask for help more often than affiliated users. Non-affiliated use, at least in health sciences, has grown independently of the University's student enrollment or faculty hiring. The Health Science Libraries serve a particularly large group of non-affiliated health care providers and researchers. The Health Science Libraries' non-affiliated users also tend to make more use of library resources and services than non-affiliated users in other libraries. In 1999, for example, nearly 65% used HSLIC computers, 59% looked for or used library materials, 56% copied materials, and nearly 32% asked for help.

### **B. Inter-library lenders and borrowers**

While Association of Research Libraries' statistics indicate that inter-library lending is growing rapidly for all member libraries, this service is a particularly significant part of the UW Libraries' services. While the Libraries is the twelfth largest academic library in the nation, it is the fourth largest inter-library lender. This indicates that its collection is particularly strong and its service particularly quick.

As libraries around the nation and world attempt to leverage their materials acquisition budgets, we can expect increasing inter-library lending. We may particularly expect consolidation of collections and corresponding remote access and lending among the institutions.

## **VIII. Government Depository and Archiving**

### **A. Government Printing Office (GPO)**

As a depository library, the UW Libraries provides free access to U.S. government publications distributed to depository libraries. Free access as defined by the Government Printing Office (GPO) means that any member of the general public has access to these materials without impediment or cost. The Libraries offers reference services for a wide range of government data and information, in electronic, microform, and print formats. Depository publications are received from the U.S. government, Washington State, Canada, the United Nations and the European Union. The Libraries staff provides service and user support for depository materials to the general public, government employees and elected officials, and businesses.

### **B. Patent and Trademark Depository Library (PTDL) Program**

The UW Libraries is a Patent and Trademark Depository Library. As such, the UW Libraries makes access to patents and all other depository materials freely available to the public. Libraries staff assist inventors, scientists, attorneys, scholars, and the general public in the efficient use of patent and trademark collections and of the associated print and electronic access tools.

## **IX. Conclusion**

The profiles above demonstrate the increasing diversity of the Libraries' users, which will be influenced by student enrollment patterns as well as the nature of the Libraries' collections and the partnerships that are being forged other universities, lending institutions and non-campus communities. Facilities planning will need to anticipate this diversity to meet the information needs of a variety of users: university-affiliated and non-affiliated, physical and virtual. Although growth in digital and traditional collections and the number of users may affect the amount of space needed in Libraries' facilities, the diversity of users will also place an importance on designing spaces that not only address the complexity of today's library uses but also are flexible enough to support additional changes in the ways in which our users rely on Libraries.

The Libraries provide invaluable resources to the people of Washington maintaining the deep collections and services essential to a research university as well as the broad collections and services essential to undergraduate education and the public at large. To finance the facilities that house these resources for all these users will require a sustained commitment to public education about their value to the State.