Executive Summary
Chemical Engineering

During the Fall of 1997, all of the faculty and 50% of graduate students in Chemical Engineering (CHEM-E) were surveyed by the Library to determine their use patterns and their levels of satisfaction with The Library's collections and information services. Thirty-eight percent (38%) of the faculty and 35% of the graduate students participated in the survey.

A few points to keep in mind when reviewing these results: first, the survey was designed to collect faculty and graduate student self-reported use and levels of satisfaction. For a more complete picture, these results should be viewed in conjunction with actual use figures, as reported in the Library's annual use statistics and as will be reported within the quantitative portion of the final CLR 6601 report. Secondly, return rates varied substantially from department to department, from a low of 23% (Business graduate students) to a high of 61% (Classics graduate students). A return rate of 50% or higher is necessary in order to say with confidence that the results reported are likely to apply to the group as a whole.

Activities and outcomes

Eighteen percent (18%) of CHEM-E graduate students report they are daily users of the library. An additional 59% report that they use the library weekly, while 71% of responding faculty report using the library on a daily or weekly basis. Half of the faculty say they browse in the stacks sometimes or often, while half say they rarely or never do. Less than half of the graduate students (45%) report browsing sometimes or often. One-hundred percent (100%) of both faculty and graduate students report they come to the library to find, borrow, or copy materials. All of the responding faculty report reading and borrowing journals, as do 89% of the graduate students, who say they do so sometimes or often.

A little over half (57%) of the faculty and 50% of the graduate students report searching print indexes or bibliographies. On the issue of seeking the advice of a librarian, very few (17%) graduate students report doing do. Thirty-eight percent (38%) of CHEM-E faculty say they sometimes or often consult with librarians in this way.

Unlike other departments surveyed, CHEM-E faculty are not heavy searchers of the Library's online catalogs – only half report doing so sometimes or often. Instead, 71% of CHEM-E faculty report they delegate library research functions to a research assistant. All of the responding graduate students reported searching the Library's online catalogs either sometimes or often. Both faculty and graduate students report searching electronic abstracting and indexing (A and I) databases and the World Wide Web (WWW) sometimes or often, though graduate students report doing so in larger numbers (89% report searching electronic A and I databases sometimes of often, 83% report searching the WWW sometimes or often). In contrast, only 37.5% of the CHEM-E faculty report searching electronic A and I databases sometimes or often and 62% of them search the WWW sometimes or often. Seventy-five percent (75%) of responding faculty say they rarely or never make assignments requiring undergraduates to use the library. A far greater number –

88% – report sending their graduate students to the library to get help in formulating or carrying out their research projects.

Very few faculty (12.5%) and no graduate students in CHEM-E report attending Library Research Workshops. Fifty-nine percent (59%) of graduate students report browsing the Melvyl® Table of Contents databases remotely; 94% of them access journal article databases remotely on Melvyl®, but only 31% download articles. Still fewer – 23% – access the library's CD ROM databases either sometimes of often. A fair number of responding CHEM-E faculty – 38% – report they never access library resources remotely, even though 75% of them report having a computer with modem at home. Sixty-three percent (63%) of the faculty also report having a computer with modem in their office.

A large majority (88%) of the faculty report using the library in preparing grant applications, though very few – 12.5% – report attending faculty seminars. Although 75% of the faculty say they rely on librarians to help teach research skills to their students, an equal number indicate they rarely or never make assignments requiring undergraduates to use the library. Also puzzling – given the faculty's reported reliance on librarians to help teach research skills to their students – is the feedback received from graduate students that none of them attend Library sponsored Faculty Seminars and 89% of them rarely, or never, attend Library Research Workshops.

Collections

Eighty-eight percent (88%) of the faculty and 83% of graduate students rate the library's collections of books as good or excellent. Less than 6% of graduate students and less than 12.5% of the faculty rated the circulating books collection as poor. Larger numbers of graduate students (83%) rated the journal collection as good or excellent. Faculty were far less favorable in their evaluation of the Library's journal collection – only half of them found the journal collection to be good or excellent. Furthermore, 38% of faculty rated the Library's collection of conference proceedings as poor.

Like their colleagues in Chemistry CHEM-E faculty and graduate students primarily use books, journals and conference proceedings in their library research. A large majority of both faculty and graduate students reported insufficient experience with special collections, documents, newspapers, slides, maps, music, videos or the Center for Research Libraries collections to evaluate them. The same held true for faculty with respect to the library's stand alone and networked CD ROMs. None of the responding faculty reported accessing the Library's CD ROM databases. Considerably more than half – 67% – of graduate students reported "insufficient experience" with the library's networked CD ROM databases to evaluate them, while 50% of them reported insufficient experience with stand alone CD ROM databases as well.

CHEM-E faculty are among those expressing the strongest preference for print v. electronic materials – 71% say they prefer print. In contrast, 83% of the CHEM-E graduate students report they prefer electronic information.

Use & satisfaction with Library services

One-hundred percent (100%) of the responding graduate students reported "insufficient experience" with the BAKER service to evaluate it, 44% of them were likewise unfamiliar with Interlibrary Borrowing Services (IBS), and another 94% were inexperienced with the Berkeley/Stanford Cooperative Program. Seventy-five percent (75%) of responding CHEM-E faculty reported they rarely or never use the BAKER service, while 63% rate Interlibrary Borrowing Service as good or excellent, as did 39% of the graduate students.

Faculty are somewhat more satisfied with Circulation and Reference Services than are graduate students (86% v. 82% for Circulation Services, 50% v. 35% for Reference Services) rating them as either good or excellent. Half of the faculty and 41% of graduate students reported "insufficient experience" with Reference Services to evaluate them. A majority of both faculty and graduate students reported "insufficient experience" with Instructional Services to evaluate them, but 29% of the total faculty respondents rated them as good or excellent. Only 12% of the graduate students rated Instructional Services as good or excellent, but again, 88% reported insufficient experience with them to evaluate their quality. Large numbers of both faculty (75%) and graduate students (44%) were unfamiliar with accessing the NRLF database to identify and retrieve materials from the Northern Regional Library Facility.

Unlike their counterparts in some other departments, CHEM-E faculty expressed interest in several of the proposed new fee based library services. Fifty-seven percent (57%) said they would use an expedited library-provided document delivery service sometimes or often while only 14% said the same for commercial fee for document delivery service. There was little interest in these services on the part of CHEM-E graduate students.
Fifty-seven percent (57%) of faculty and 76% of graduate students reported they would rarely or never use desktop access to information from outside vendors and publishers.

The majority of those who are remote users of library resources report searching the library's online catalogs (60% of faculty, 77% of graduate students) , browsing Melvyl® Table of Contents databases (50% of faculty, 59% of graduate students), accessing journal article databases on Melvyl® (100% of faculty, 94% of graduate students), and searching the WWW (75% of faculty, 94% of graduate students). Only 18% percent of CHEM-E graduate students report they search the Library Web remotely either sometimes or often, while half of the faculty reported they did.

Sixty-seven percent (67%) of graduate students rated the library's hours as good or excellent while 11% rated them as poor.

Summary – Free-text Questions

FACULTY

No. of surveys returned: 8 (38% return rate)

Note: Numbers following specific comments indicate the number of times the comment was made.

1.B. Please describe any recent trends or changes in scholarly communication ... describe how the Library could help you integrate these changes into your teaching or research.

- More papers are submitted for publication and reviewed electronically. It is not clear what role the library might play in this.
- Proliferation of new journals and newsletters. Library cannot help. Reform needs to be made at the source.

3.E. Any specific suggestions for prioritizing quantity or quality of services?

- I think that is should be a high priority to maintain excellent reference services.
- Make BAKER an inter-branch service (no fee).
- I have found students serving circulation services to be seriously under-trained.
- I would like to see the libraries open on weekends and vacation periods.

5.B. Which electronic resources have you used the most?

- MELVYL (3)
- GLADIS (3)
- CC

- Prefer electronic - faster and accessible at all times.
- Electronic is faster and more convenient.

- It's faster and easier on the eyes to search print resources.
- Print is easier to read, to highlight; can take it with me. (2)
- Prefer print - can copy and have permanently available. If electronic resources were remotely accessible and could be downloaded and printed, they would be much preferred.

- Prefer electronic for searching, print for journals and other texts.

Qualities most important in a library or information service supporting scholarly research?

- Speed, rapid access, timeliness (3)
- Access (2)
- Currency (2)
- Easy to use (2)
- Accuracy
- Convenience
- Expertise
- Helpfulness

- Orderliness
- Promptly displayed journals
- Reference
- Service
- Skill

10.A. Unmet library needs?

- Journal collections
- Too many journals are being (or have been) eliminated from the library.
  - More journals -- some journals which are needed are not subscribed to by the Library.
  - The Chemistry branch continues to cancel journals. I have asked for an abstracting service (CC is not acceptable because only titles are available) but this is said to be too costly. THERE IS NO SOLUTION TO THIS PROBLEM AND IT IS INTOLERABLE. It is getting impossible for me to stay up with my field here at Berkeley.

- Availability of reference services.
- Student access.
- Student respect for library resources has to be heightened.
- To adequately educate the campus community (particularly faculty) about library and electronic resources and how to use them.
- Libraries have great problems stemming from expansion, seismic re-enforcement, and under-funding. In my opinion, at least two of these stem from lack of vision and breadth of vision in top management of 25-30 years ago. I suspect that today's operating problems stem from little breadth of experience in today's middle level management.
- Much faster turn around time is needed for journals at the bindery.
- Insufficient open hours

GRADUATE STUDENTS

No. of surveys returned: 18 (35% return rate)

Note: Numbers following specific comments indicate the number of times the comment was made.

1.B. Please describe any recent trends or changes in scholarly communication ... describe how the Library could help you integrate these changes into your teaching or research.

- Abstracts for papers submitted to technical conferences are often done completely electronically, using html format and the sponsoring organization's home web page.
- More journals are being published in electronic form, with subscription required to download/print articles. If UC could subscribe to some of these, students could

print articles directly and thus make the whole article obtaining process more efficient.

3.E. Any specific suggestions for prioritizing quantity or quality of services?

- Availability of books & journals (5)
  - The most important service for me is maintaining the large collection of journals and getting recent journals bound and quickly returned to the stacks ... I think it is much more important to have complete and extensive collections of books and journals than to offer great "customer service". (3)
  - Your journal service needs to be improved. All, except for one, journals that I regularly use (or would like to use) are unavailable, while other (seemingly not too useful or too specialized) are available.
- Hours (3)
  - Library hours are a significant problem. The university's success is tied to continual research progress and the limited hours of library access considerably hinder research.
- Abstracts are very valuable for publication screening but a majority are not available online (on MELVYL or GLADIS). This would be a big help. As of now, I use Chemical Abstracts -- it's expensive, only available after 5:00 pm and not well updated. (3)
- Retrospective online indexing (3)
  - The electronic indexing service of MELVYL (Current Contents) is also vital to my literature searches and should be extended to as early a date as possible.
  - Extended time search capabilities for MELVYL -- i.e. search for older materials.
  - Online searches are very important. Lack of older materials on some of the databases is a problem.
- I very rarely, if ever, use reference librarians, etc. It seems to me the people who most often use services like reference librarians are non-UC people. Most grad students and faculty no (sic) how to search for information on their own. Unfortunately, that information is often only available at another library.
- Conference proceedings are often difficult to reference and find.

5.B. Which electronic resources have you used the most?

- MELVYL (7)
- Current Contents (MELVYL) (7)
- GLADIS (6)
- BIOSIS
- INSPEC
- Medline

- Prefer electronic; remote access from office. (6)
- Prefer electronic; saves time. (4)
- Prefer electronic; can immediately link to reference software (EndNotes).
- Prefer electronic; more information available.
- Prefer electronic; more efficient searching.

- Prefer electronic; can search many different strings.
- Prefer electronic; can be accessed by multiple people.
- Prefer electronic; more convenient.
- Prefer electronic; easier to search.
- Prefer electronic; saves paper.
- Prefer electronic; easier to filter content, manage large literature searches, generate bibliographies, archive searches.
- Prefer electronic; more convenient to have all the resources in one location.

9. Qualities most important in a library or information service supporting scholarly research?

- Comprehensive/extensive (10)
- Availability (6)
- Convenient (5)
- Access (4)
- Fast service (4)
- Organized (3)
- Complete (2)
- Current/up-to-date (2)
- Ease of access (2)
- Efficient (2)
- Electronic/online information (2)
- Resourceful (2)
- Accurate
- Content
- Effective
- Helpful
- Knowledgeable staff
- Well maintained

10.A. Unmet library needs?

- ILS
  - It would be nice to be able to request a paper from another library through the online catalogs.
  - There is often a considerable delay when getting books, articles, or journals from NRLF or especially Interlibrary Services. This problem gets worse as fewer journals exist in multiple branch libraries and at Berkeley at all. The demand for these services seems to be increasing as more journals and books have to be obtained from other UC campuses. The time required to obtain items from other libraries needs to be decreased. Furthermore, a more rapid way of notifying users that an item is ready to be picked up is needed. Mailing cards takes too long. I realize email notification is now being used more.
  - Interlibrary loans should be easier.
  - ILL can be slow. Would be helpful if emails announcing arrival of materials were more specific, as I often have several in the works at once with varying priority.

- Staff
  - I think the librarians who are students need to be trained better. Often, they can't answer my questions.
  - In the Chemistry Library, the Circulation desk's knowledge of the books on reserve borders on clueless-ness.
  - The Chemistry Library is understaffed. Journal re-shelving is slow.
- Adequate copiers.
- Longer hours in Physics Library.
- This is just a simple request. Why can't there be staplers in the Chemistry Library?
- It would be nice if a list were available where you could look up a journal and find its call number. It takes too long to do that on MELVYL; a simple list on paper would be much better.
- Ability to search for patents needs to be improved.
- Sometimes it is difficult finding something in GLADIS or MELVYL when I know it exists and should be in one of the UC libraries. I suspect it's because it hasn't been entered yet.
- Current Contents is the resource I use most often. It's unfortunate it doesn't date back past 1989. Databases with listings of older articles are needed.
- There are very few quiet places to study on the campus. Most buildings suffer from noise from lab/office equipment, the incessant vehicles and repair crew around the buildings, and from very poorly designed air conditioning systems which are annoyingly loud. Most libraries on campus are so layed out as to aggravate the situation. Large rooms with many desks and chairs, lacking any sound-absorbing material. Better design, e.g. interspersing tables with stacks and carpeted floors, would making studying much easier.
- Important journals are often kept inconveniently at NRLF.
- GLADIS should have more commands as MELVYL does (e.g. keyword).