Information Services

- Reference Services
- Educational Services
- Outreach Services

INFORMATION SERVICES
(formerly Reference & Research Services)

Marlene A. Porter, Head of Reference and Research Services
Jonathan Hartmann, Reference/Outreach Services Librarian
Jolene Miller, Reference/Education Librarian
Anne Bushel, Reference Associate

> The Reference & Research Services department revised it's name to Information Services to better reflect the mission of the department.

Although not all of last fiscal year's goals were achieved most were either completed or initiated. Those goals that fell short did so due to a staffing shortage and increased activity within as well as outside the department.

Staffing & Scheduling

The first 4 months of the fiscal year found the Reference/Education Librarian position vacant. M. Porter devoted a good deal of time, both administrative and clerical, from July through September in filling this position. J. Miller accepted the position in September and began working on November 1, 1995.

On February 5, 1996, A. Bushel became a full-time Reference Associate in the Department. This position has enabled the Library to staff the Reference Desk on Sundays during the school year, September through May. It has also enabled the IS staff to devote time on the goals listed last fiscal year. Future plans to add a basic reference librarian do not appear hopeful due to the fiscal down turn the College is currently experiencing.

Though the Information Services staff has increased by 1 person, the office space was reduced due to Library staff reorganization. The Universal Workstations' room became the Manager of Access Services, D. Remaklus, new office. M. Porter planned out the limited space and was able to give A. Bushel a small work area in the remaining office space. The Universal PC Workstation was reinstalled in the main Information Services departmental office but the Universal Mac Workstation is not yet installed due to a lack of a network connection. It is hoped that this will be completed soon.

A staff shortage caused a reduction in Reference Desk hours. Fifteen weekly hours were temporarily cut during the first 2 months of the fiscal year. Cut were the first hour in the morning (9 a.m. to 10 a.m.), the noon hour (12:00 noon to 1:00 p.m.) and the last hour in the afternoon (4:00 p.m. to 5:00 p.m.) Since business is usually slow during the summer, the cut in hours did not dramatically effect service. Regular hours (9 a.m. to 5 p.m., Monday through Friday) were resumed in September.

Reference Desk & Resources

Plans to install a new Reference Desk resumed in March but again came to a halt when Library funds dried up. Plans may not occur again for a long time. One bright note however, the department did obtain new chairs for all its staff in March and June. All were very thankful.

Reference transactions were down about 11% from last fiscal year. Even though the number of staffing hours increased 2%, result of additional Sunday hours February through May 1996, there was only a 0.9% increase in weekday hours. One reason for this decrease in questions is a result of our educational program. The number of tours/orientations increased 59% and the number of people taking the tours/orientations increased 56%. More people learned how to use the library and its resources so fewer questions needed to be asked. Though there was a 19% decrease in the number of instructional sessions, we did have a 7% increase in the number of staff, faculty and students participating in our sessions. I project that there will be a slight decrease in questions again this coming fiscal year because we have fairly well saturated the MCO campus community with educational sessions. In other words, the only people who will be needing instruction will be the new faculty, staff and students. The decrease in reference questions is not a negative indicator but a positive reflection upon the Library's education programs.

Literature search requests decreased again this fiscal year but only by 2% compared to a 22% decline last year. This decrease is again attributed to the availability of the medical databases via MCOnet, however, 92% of the search requests were for databases available on MCOnet. The decrease may also be the result of additional databases OhioLINK has added as well as several CD-ROM's the Library had mounted on MCOnet by Information Systems. The new databases and CD-ROM's are:

OhioLINK Databases	Library CD-ROM's or links to service
Hannah Online (Aug. '95)	Electronic Animal Model Series (Dec. '95)*
Britannica Online (Aug. '95)†	Harrison's Plus with USP-DI (Dec. '95)*
ArticleFirst (Aug. '95)	MAXX (Electronic Med. Lib.) (Dec. '95)*
PapersFirst (Sep. '95)	Child Abuse & Neglect (Dec. '95)‡*
ProceedingsFirst (Sep. '95)	HSTAT (Clinical Protocols) (Jan. '96)**
Select Telephone Directory (Sep. '95)	
Bioethicsline (Jan. '96)	
ERIC (Jan. '96)	
Contemporary Authors (Jan. '96) †	† WWW access only
Encyclopedia of Associations (Jan. '96) †	‡ Not obtained by Library
Medical Electives Database (Jan. '96)	* Accessible via WinServe on MCOnet
Biological Abstracts (Mar. '96)	** Accessible via OSLER under Health Sciences Databases
Oxford English Dictionary (May '96)†	
Merriam Webster's Collegiate Dictionary (May '96) †	

A majority of the library CD-ROM purchases were able to be made accessible via WinServe on MCOnet. However, Information Systems was not successful in mounting the Physicians GenRx/Merck Manual CD. This was a disappointment because the *Merck Manual* is one of the Library's reference publications that has a tendency to disappear and making it available on the campus network may have stop this from happening.

Changes and additions occurred to the computer equipment in the Online Resources Room (ORR). A second Mac was installed along with an Apple printer. An A/B switch had to be attached to the printer in order for both Macs to access the printer but the noise from the Apple printer was very unpleasant. Eventually a purchase was made so that the Macs could use the same printers the other PCs used and the A/B switch was eliminated. One dumb terminal was able to have a printer attached to it. It is hoped that this coming year that an additional terminal or the remaining three terminals in the room can be attached to a printer.

As OhioLINK moves to more Web accessible databases, it will be imperative that the Library have Web accessible machines in the ORR. Currently, there are 5 OhioLINK resources that can **only** be accessed via the WWW and in the first quarter of the coming fiscal year, OhioLINK will be offering 2 more **major** resources with Web only access. At present, the ORR does not have **any** Web accessible machines for public use making it difficult to assist patrons when they have questions about these resources. I hope this coming year that the Library is able to upgrade the ORR's PCs.

If machines are upgraded in the ORR, the Library will have to consider replacing the type of printers currently in use. Many Library's are moving to laser printers with attached debit card machines. This may be the course of action the Library will have to take with the reduction in funds received for supplies.

M. Porter became editor of the Library newsletter, *Books & Bytes,* in August 1995. The publication frequency is now quarterly (September, December, March and June.) To facilitate and ease the publication process, a procedure and time line were written.

M. Porter initiated having a pamphlet collection for the Library. She met with S. Stevens, Head of Bibliographic Control, who suggested a procedure to follow. In November, J. Miller was given the task of obtaining free pamphlets from as many health oriented organizations as possible. M. Porter was able to obtain a locking file cabinet for the ORR where the pamphlets will be placed. It is hoped that these pamphlets will become available for patron use next fiscal year.

M. Porter was given the task of coordinating the implementation of library forms on the WWW. After several meetings and revisions, all but a couple of the forms became available under Library Services on the Library's home page. J. Garrett was instrumental in creating and placing these forms on the Library's home page.

When A. Bushel moved to the Information Services Department, she was given the task of keeping the Reference Collection book shelves in order. To familiarize her with the collection, she was also given the task of locating updated editions to items currently in the collection. After A. Bushel completes this project, M. Porter will weed and update the collection.

Online/Database Searching

We again continued our OVID and Dialog accounts with Ohionet so that we have access to databases not freely available from OhioLINK.

There was less than a 2% decrease in the number of requested literature searches. There was about a combined 25% decrease in requests from faculty and residents and a combined 57% **increase** in requests from administration/staff, graduate students, allied health students, medical students and nursing students. This increase may be due to the classes offered in which we inform participants about our literature search service. The decrease from faculty is most likely due to the fact they can access our system from their offices faster than it would be to request the Library to perform a search.

Educational Services

All of the educational activities from the previous fiscal year continued with the addition of several database instructional sessions for several Physical Therapy classes. The Allied Health and Nursing Departments have requested more sessions which apparently is due to our excellent service. It is pleasing and encouraging that the Library is able to be incorporated into the curriculum of these departments and it is hoped that this may carry over into the Medical School as well.

As mentioned previously, the Library had a 59% increase in tours/orientations and a 56% increase in the number of people participating in the sessions. Though the number of instructional sessions decreased, I anticipate there will be an increase this coming year with the new IME program mentioned below.

When J. Miller's was hired as the Reference/Education Librarian, her first project was to update the collection of Library help sheets. All thirteen existing, in-house library guides were revised, and nine new guides created. Each library guide now follows a consistent format which presents a more professional image to the MCO community: a header that includes the MCO logo and reference desk phone number; a section of general information that includes reference hours; a section on access; and sections specific to the subject of the guide.

Some of the new OhioLINK databases, such as HANNAH and FirstSearch, were of interest to select populations on campus. For these databases, OhioLINK-provided guides were duplicated and made available. OhioLINK also revised the pocket guides; the acrylic guides and cardboard stands were assembled and placed in public areas. All the help manuals (3-ring binders) were updated with the new guides.

Early in 1996, J. Miller took over most of the administrative duties of the library education program: working with faculty, scheduling classes, coordinating instructors, developing course outlines, and keeping statistics. She began scheduling classes and coordinating instructors in January and began keeping statistics in May. New training sessions were developed as new databases became available: Harrison's Plus, PsycINFO, and Biological Abstracts.

The appointment of a new assistant director allowed the library education program to undertake the development of a new class, an elective in information management. This information management elective (IME) will address issues such as the biomedical publication cycle,

identifying and using library resources, evaluating these resources, preparing for poster sessions and publications using tools such as bibliographic management software, and lifelong learning. The course was submitted for approval in both the medical and graduate schools.

The IME is designed to be modular, so any unit can be used alone within the context of another class. An example of this is the cooperative venture with Dr. Christopher Bork, Dean of the School of Allied Health, who teaches a research methods in physical therapy class. As a part of this class, the library will be teaching hands-on information skills, several sections from the IME in Fall 1996.

Now that J. Miller has experience in the Mulford Library, the library education program will run more smoothly in the future.

Outreach Services/ AHEC

AHEC

J. Hartmann began attending the biweekly AHEC meetings and sending minutes of the meetings to M. Porter in June, 1995. M. Porter introduced J. Hartmann to the AHEC librarians and staff during visits to the AHEC's in November, 1995 and April, 1996. A new AHEC library at St. Rita's Medical Center in Lima was added to LAHEC in December, 1995. To facilitate service there, P. Scheuer, Information Systems, and J. Hartmann installed a PC with PCAnywhere software at St. Rita's in June, 1996.

In addition to J. Hartmann's site visits, other AHEC visits were made during the year. D. Boilard, B. McNamee and J. Hartmann visited LAHEC, including Lima Memorial Hospital, St. Rita's Medical Center, and the LAHEC Center Office, in February, 1996. Also, Boilard and Hartmann demonstrated the Library's role in the AHEC program to Gamini de Silva, a visiting librarian from Sri Lanka, at the Sandusky AHEC in April, 1996. Services were improved when medical CD-ROM's and the World Wide Web were made available to the AHEC sites in May, 1996.

The Office of Rural Health and AHEC, Information Systems, and the Library informally agreed in October 1995 to make J. Hartmann the contact person for all AHEC site problems in order to reduce confusion and improve communication with the sites. Communication with the AHEC's was further improved when he began sending the Library newsletter to the AHEC libraries in January, 1996.

M. Porter created an AHEC policy which will standardize and improve services to the AHEC's. As part of this policy, J. Hartmann will make quarterly site visits to each AHEC. He also began keeping a log of all AHEC contacts in April, 1996.

Nursing Outreach

Nursing outreach was a priority in December, 1995 and January, 1996. J. Hartmann worked with the School of Nursing to establish the Library at St. Rita's Hospital as the central site for library services to nursing extension program students in Lima. The Library purchased nursing journals for the library as part of this effort.

Education

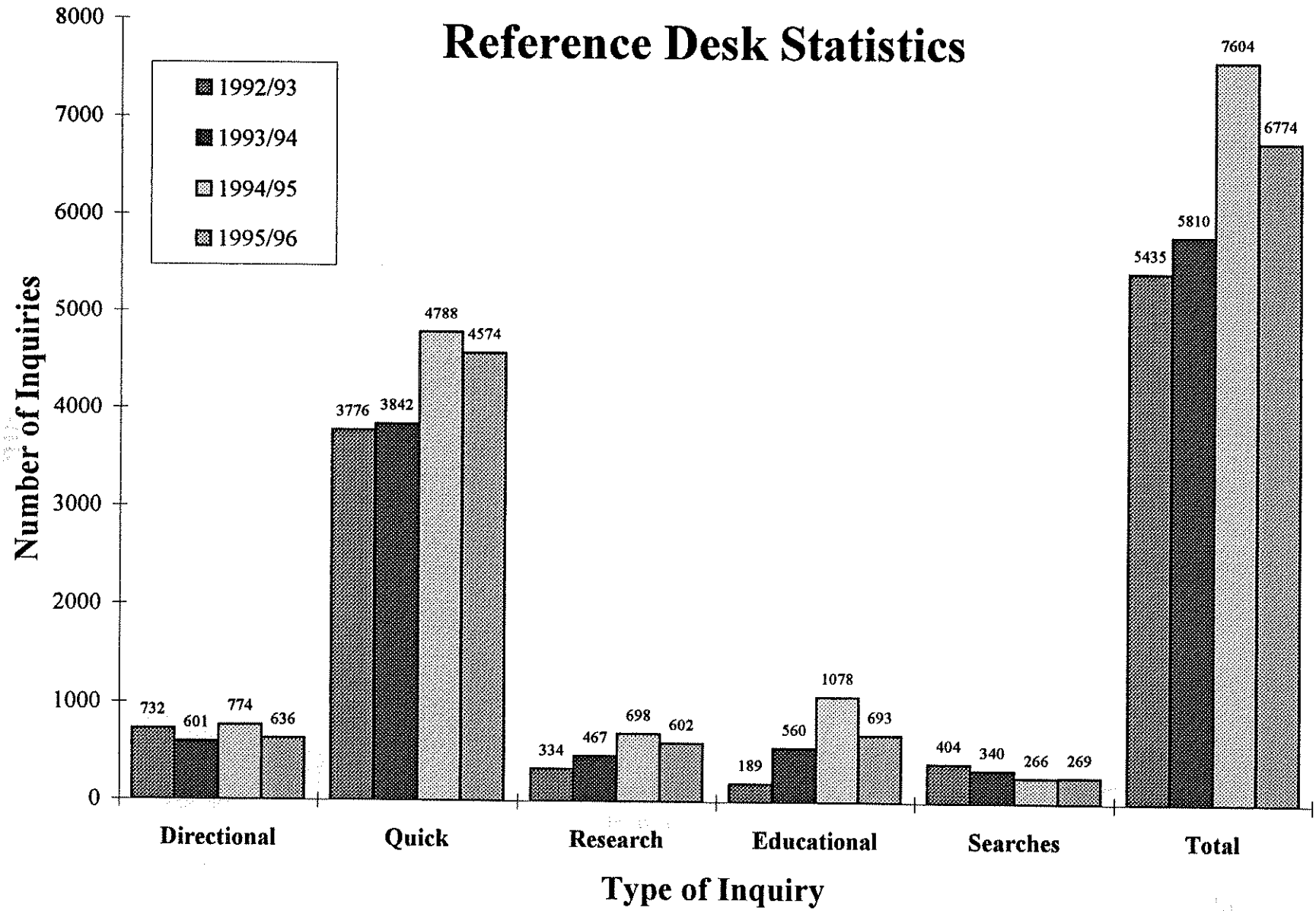
An innovative AHEC sponsored tutorial for rural physicians, "Medical Applications of Computers," was held in Defiance in May-June, 1996. The Library played a large role in planning, organizing, and executing the tutorial. The project was successful, although there were problems as in any new undertaking. One major problem with the tutorial was that the instructors were not given enough time to prepare for the sessions. Also, there were not enough PCs available to allow for hands-on training. Another problem was that the World Wide Web did not function well. A second tutorial of this kind may be held in Bellevue in September, 1996.

Marketing

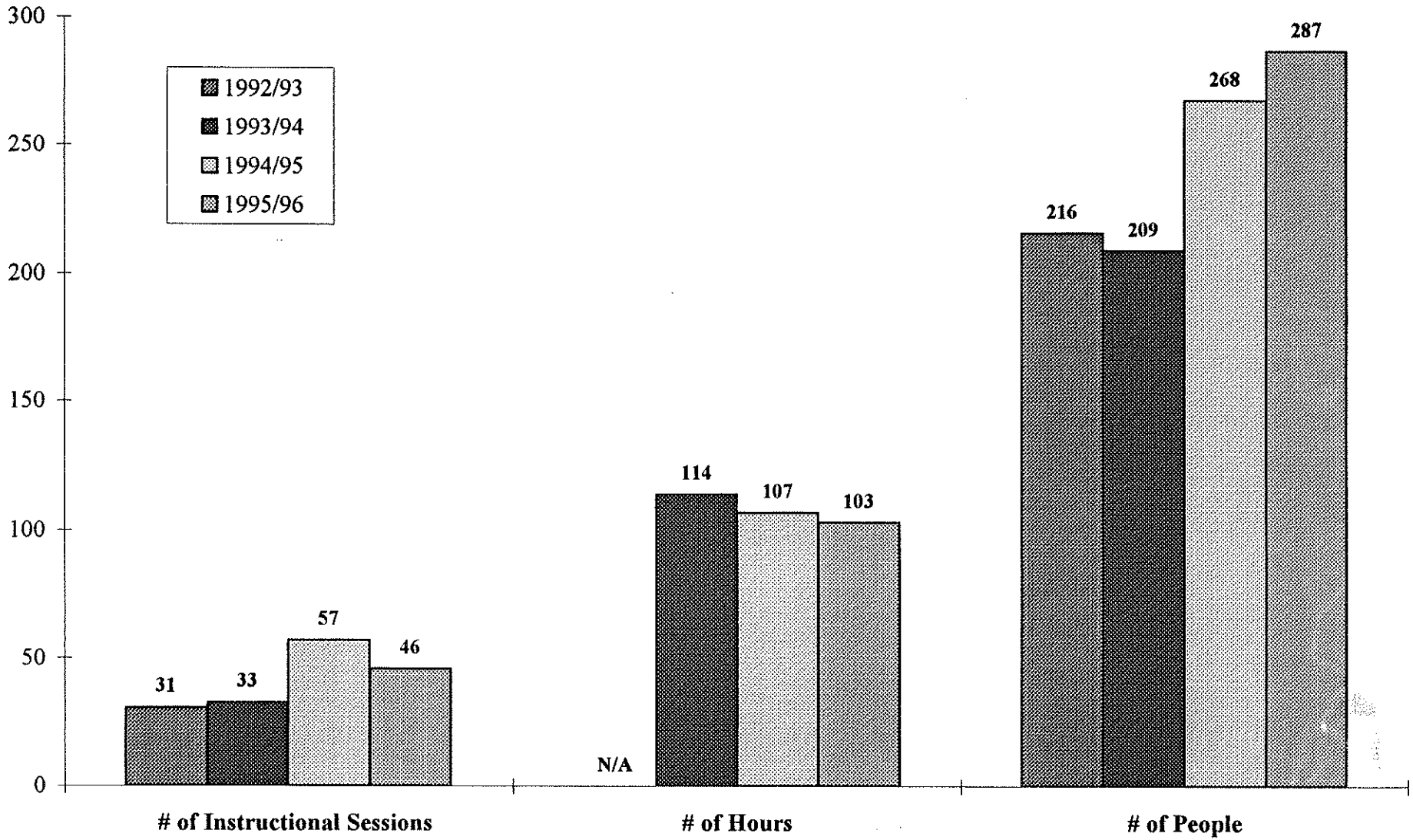
Plans for marketing Library services to hospitals in northwest Ohio were initiated in November, 1995. Because of these plans, meetings were held in November-December 1995 to determine fees for outside access to library services. These meetings resulted in a proposed fee structure for outside services. J. Hartmann compiled a list of hospitals in Northwest Ohio that the Library could potentially provide services to and had the MEDesign department create a map showing their locations in February, 1996. He also began writing an outreach proposal for the coming fiscal year which will include marketing plans.

Goals for FY 1996/97

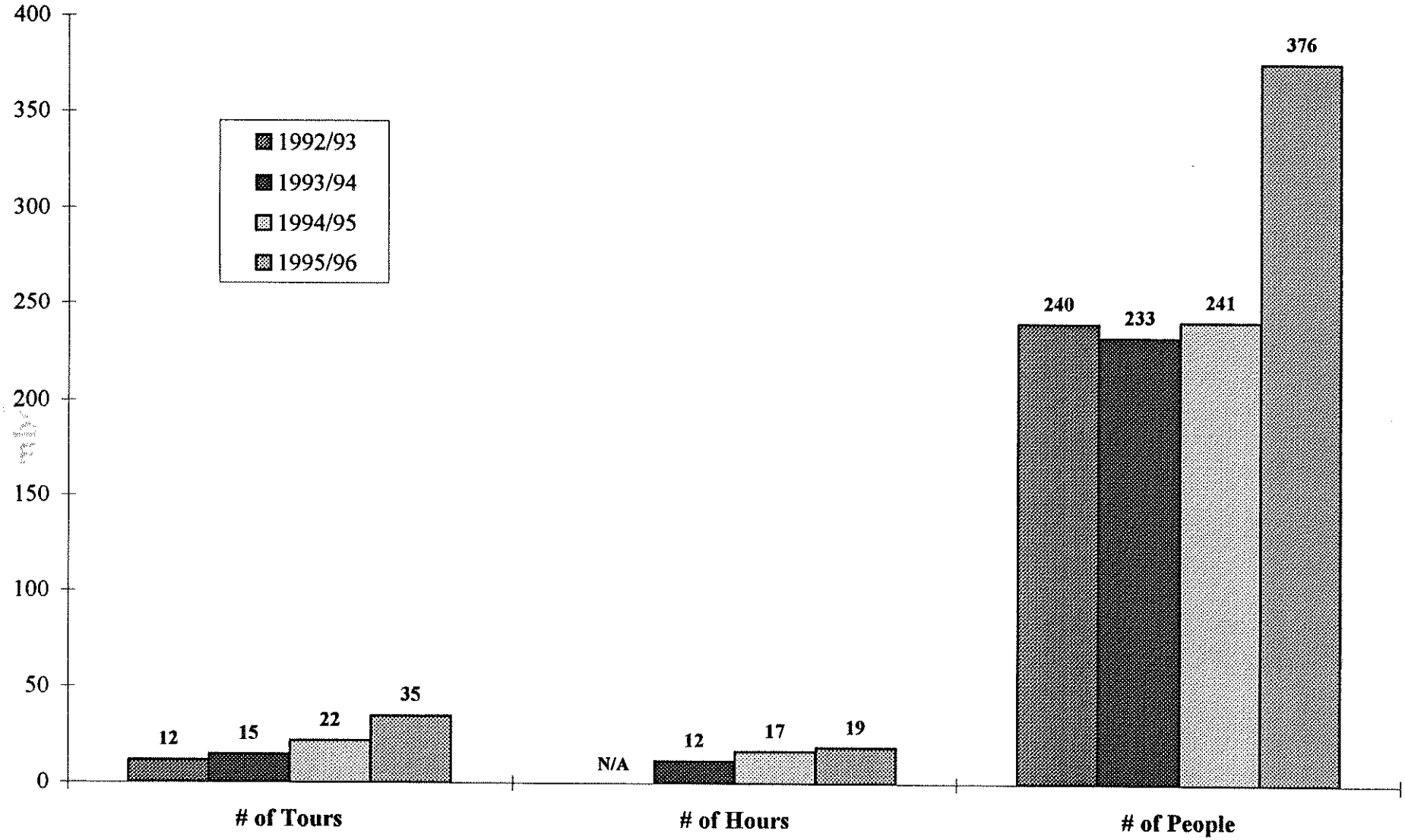
- Design and teach subject specific WWW classes
  Increase the department's role in teaching of information resources to MCO faculty, staff and students
- Implement a personal research service for MCO faculty
- Weed and update the Reference book and index collection
- Implement outreach services for health care institutions and workers in Northwest Ohio
- Create electronic pathfinders
- Complete a departmental policy and procedure manual
- Automate Reference Desk statistics tracking


Reference Desk Statistics
1992/93
1993/94
1994/95
1995/96
Number of Inquiries
8000
7000
6000
5000
4000
3000
2000
1000
0
732
601
774
636
3776
3842
4788
4574
334
467
698
602
189
560
1078
693
404
340
266
269
5435
5810
7604
6774
Directional
Quick
Research
Educational
Searches
Total
Type of Inquiry

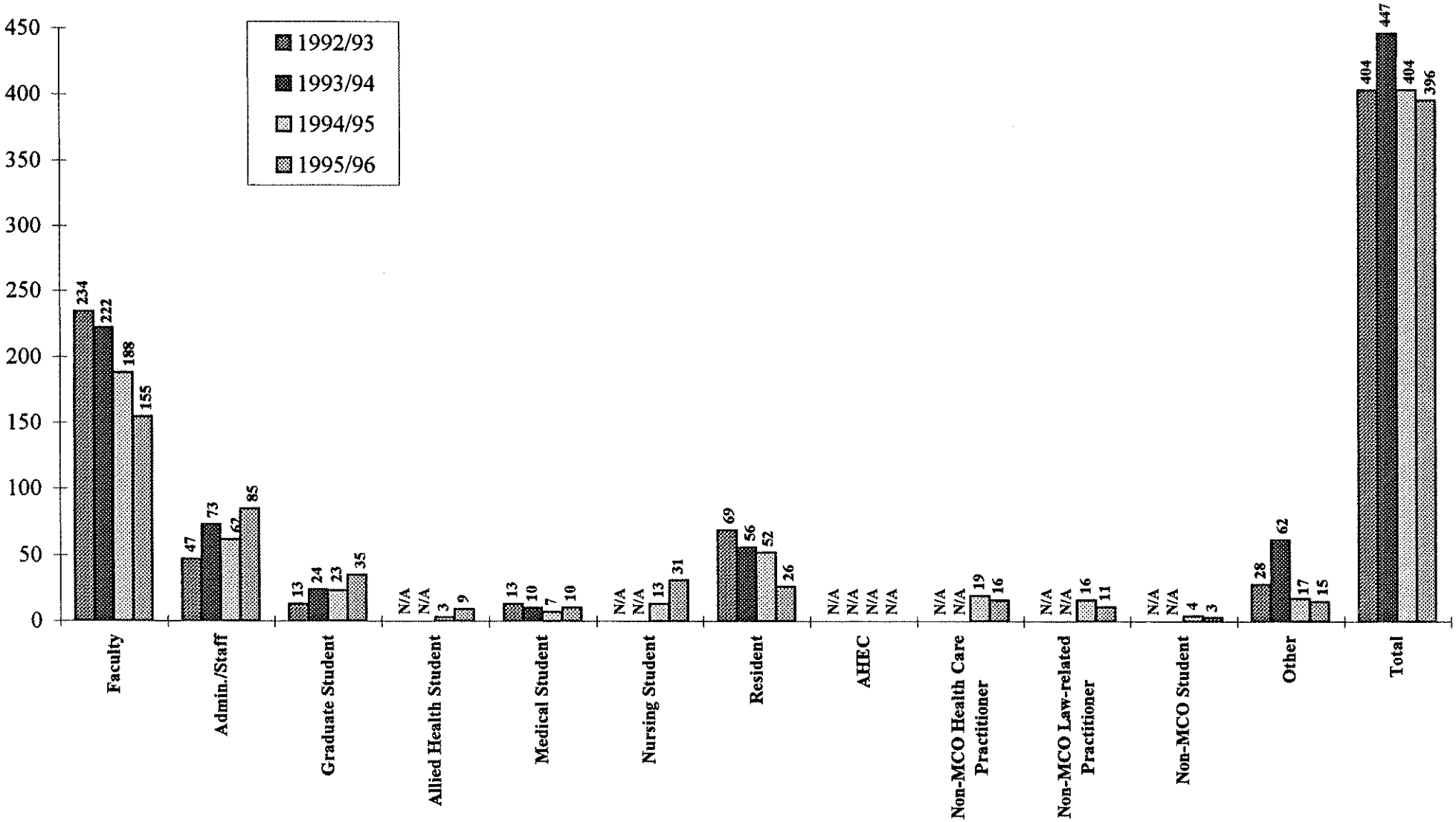
Instructional Sessions Statistics



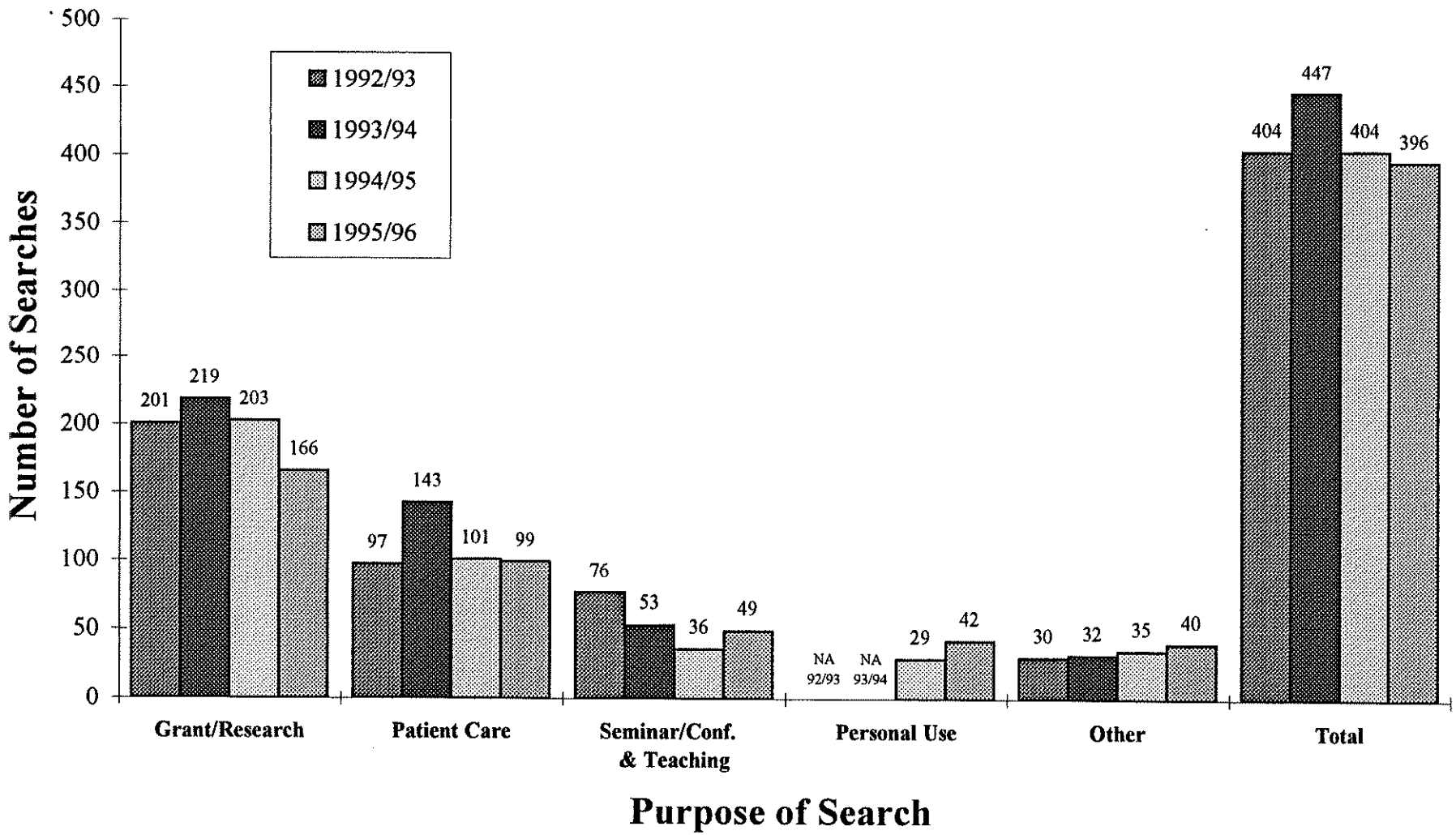
Tour/Orientation Statistics



Librarian Performed Literature Searches by Patron Type



Librarian Performed Literature Searches



Bibliographic Control

- Collection Development
- Cataloging
- Serials Control

BIBLIOGRAPHIC CONTROL

Sheryl R. Stevens, Head of Bibliographic Control
Heidi L. Steyer, Acquisitions/Cataloging Assistant
Linda D. Knotts, Serials Assistant
Anne M. Bushel, Serials Assistant/Reference Assistant
Amy Broaddus, Student Assistant (part-time)
Matthew Dwenger, Student Assistant (part-time)
Joanne Gray, Student Assistant (part-time)
Anne Kurtenbach, Student Assistant (part-time)
Kim Recker, Student Assistant (part-time)
Julie Tellman, Student Assistant (part-time)
Brenda Styblo, Student Assistant (part-time)
Kevin Hetrick, Volunteer

Despite a permanent reduction in full-time staff, the Department of Bibliographic Control (responsible for collection development, cataloging, serials management, and overall quality of the Library's online catalog) continued to operate at a highly productive and efficient level in FY 1995/96. In addition to maintaining and, in some cases improving, previously established workflows and output, the Department took on two new major responsibilities: coordinating maintenance of the Library's electronic resource collection and overseeing the content of its World Wide Web page. Also, a large-scale project involving barcoding the Library's bound journal collection was organized, initiated, and about half-completed by the end of the fiscal year, with the help of part-time temporary staff.

Staffing

The size of the Department's full-time staff was reduced by one F.T.E. at the end of January, 1996, when Anne Bushel was permanently transferred to the Department of Information Services. Ms. Bushel had been working part-time in Bibliographic Control on serials tasks and part-time in Information Services staffing the Reference Desk since January, 1995, following completion of her master's degree in Library Science.

Effective with the transfer, the Department's workflow was reorganized as follows: the former Cataloging Assistant (Heidi Steyer) assumed all acquisitions and order-processing duties and became the Acquisitions/Cataloging Assistant, and the former Acquisitions/Serials Assistant (Linda Knotts) assumed almost all remaining serials duties and became the full-time Serials Assistant. A portion of the serials bindery tasks continued to be handled by two students who were hired on a part-time basis in October, 1995.

Four additional student assistants were hired in January, 1996 to barcode the Library's bound journal collection in preparation for moving part of it to a nearby, off-site depository. See the ***Serials*** section of this report for additional details on the depository project.

Also, in October 1995, a physically disabled volunteer began working one day a week on a variety of Bibliographic Control tasks, following a placement request from the MCO Rehabilitation Department.

Acquisitions / Collection Development

While the total amount of money spent on new books, audiovisuals, and other non-journal materials remained almost the same as in the previous fiscal year, more items were actually purchased; however, smaller percentages were spent on audiovisuals and CD-ROM's. Also in FY 1995/96: the ordering process continued to be streamlined and automated; a comparative analysis of the currency of the Library's book collection by subject area was compiled; the Department of Bibliographic Control assumed responsibility for maintaining the Library's electronic resource collection and Web page; the initial phase of the Ohio-LINK conspectus project was completed.

- ***Expenses***

  The Library spent $42,301 on new books, audiovisuals, and full-text CD-ROM databases in FY 1995/96, 1.3% less than in the previous fiscal year. (See table directly below for breakdowns and comparisons. See also the **COLLECTION COSTS** table at the end of this section.) While overall expenditures remained nearly the same as in FY 1994/95, the percentages spent on non-print materials decreased significantly because, unlike the previous fiscal year, funds from the Library's special income account were not available for collection development purposes. In addition, the decision was made to at least temporarily cut back on the purchase of CD-ROM products until the continuous delays and problems involved in making them available on the MCO campus network were satisfactorily resolved with the Department of Information Systems.

BOOK & NON-PRINT EXPENDITURES, 1994-1996			
	FY 1995/96	**FY 1994/95**	**% Change**
Books	$37,037	$33,099	+11.9%
Audiovisuals	$2,044	$5,201	-60.1%
CD-ROM's	$3,220	$4,553	-29.8%
TOTALS	**$42,301**	**$42,853**	**-1.3%**

- ***Total Items Acquired***

The Library added 751 items to its book and non-print collections in FY 1995/96, of which 579 (77.1%) were purchased and 172 (22.9%) were donated or acquired free of charge. (See table directly below and **COLLECTION COSTS** table at the end of this section for breakdowns, comparisons, and averages.) About 15% of all purchases were requested or recommended by faculty members. The total number of new purchases increased 44.0% from the previous fiscal year, mainly due to the Library taking advantage of periodic "deep discount" sales at the MCO Bookstore. The total number of donated/free items decreased by 60.1% from the previous fiscal year, when a now-closed MCO Department had given its entire collection to the Library. FY 1995/96 donation statistics were more typical for any given year.

NUMBER OF BOOK & NON-PRINT ACQUISITIONS, 1994-1996

	FY 1995/96	FY 1994/95	% Change
PURCHASED			
Books	551	301	+83.1%
Audiovisuals	26	97	-73.2%
CD-ROM's	2	4	-50%
Total	579	402	+44.0%
GIFTS/FREE			
Books	133	430	+69.1%
MCO Theses	33	37	-10.8%
Audiovisuals	4	3	+33.3%
Total	172	440	-60.1%
TOTAL	**751**	**842**	**-10.2%**

Since FY 1988/89, the Library has added an average of 425 book and non-print items to the collection each year, although the annual totals have varied widely. See table directly below and the **BOOK & NON-PRINT PURCHASES** graph at the end of this section for yearly totals and comparisons.

BOOK & NON-PRINT PURCHASES, 1988-1996

FISCAL YEAR	NO. OF ITEMS
1988/89	330
1989/90	188
1990/91	216
1991/92	822
1991/93	313
1993/94	552
1994/95	402
1995/96	579
TOTAL	**3,402**

- ***Subject Overview & General Comments***

The general subject percentage breakdowns for FY 1995/96 purchases and total acquisitions were about the same as those for the previous fiscal year. (See table directly below for FY 1995/96 percentages.) To facilitate future collection analysis and development, acquisition statistics will be compiled and maintained on a more detailed, subject-specific basis beginning in FY 1996/97.

BOOK & NON-PRINT ACQUISITIONS BY GENERAL SUBJECT, FY 1995/96

	Items Purchased	% of Total Purchases	Total Items Acquired	% of Total Acquired
Clinical Sciences	229	39.5%	305	40.6%
Basic Sciences	119	20.6%	177	23.6%
Nursing	110	19.0%	121	16.1%
Allied Health	67	11.6%	81	10.8%
All Other	54	9.3%	67	8.9%
TOTALS	**579**	**100.0%**	**751**	**100.0%**

A continued effort was made in FY 1995/96 to enhance and update the Library's reference collection. (A little over 20% of all acquisition expenses went toward reference materials.) In addition, ongoing emphasis was placed on adding books of practical interest to students, such as clinical handbooks, question-and-answer books, and care plan books.

Special attention was also given to analyzing and enhancing the Library's collection in support of MCO's newly established physician assistant program, as well as the nursing, occupational health, and physical therapy programs, all scheduled for upcoming accreditation reviews.

Three additional CD-ROM databases -- ***Harrison's Plus***, ***Child Abuse & Neglect***, and ***Electronic Animal Model Series*** -- were added to the Library's collection in FY 1995/96 and made available to users campus-wide by the Department of Information Systems. Due to the continued problem of an apparent lack of time and/or staff in IS to systematically handle CD-related work requests from the Library, near the end of the fiscal year it was decided not to purchase any new CDs or the updated versions of any previously purchased CDs until these critical interdepartmental workflow issues can be satisfactorily resolved. In addition, it was subsequently decided to completely remove the problematic DOS version of the ***Drug Information Fulltext*** CD off the campus network pending future purchase of a newer Windows version.

- ***Collection Analysis***

A comparative analysis of the currency of the Library's book collection broken down by subject areas was completed in February 1996 which proved both useful and discouraging. It was useful because the compiled data revealed which subject areas in the collection were particularly outdated and needed immediate special attention. However, the analysis was also discouraging (to say the least!) because it showed that only 7.2% of the Library's book collection could be considered "current" -- i.e., published within the last five years -- as compared with 17.2% for the same subject areas in all OhioLINK libraries, and 13.0% for the National Library of Medicine. (Detailed results of the study are included at the end of this section.) Annual or biannual replications of this study will be made to documents changes and progress. In addition, percentages will also be compiled from the data which indicated the relative depth and strength of each subject area in the Library's collection.

- **New Responsibilities**

In March, 1996, the Head of Bibliographic Control was given responsibility for coordinating development of the Library's electronic resource collection, defined to include the content of the Library's World Wide Web site as well as electronic information resources (such as CD-ROM's) purchased for Library users. Previously, decisions to

purchase electronic resources or to add, subtract, and create links and resources at the Library's Web site had not been definitively assigned to any one particular department or person, resulting in a less-than-optimum methodology for developing a highly relevant, useful, and up-to-date electronic resources collection. A collection development policy for electronic resources was subsequently written to document and outline the Library's new (and hopefully improved!) approach to the process.

Working with the Computer Services Librarian, a number of new links and resources were added to the Library's Web page between March, 1996 and June, 1996, including: an online "Table of Contents" feature, which provided users with links to sites containing the tables of contents (and sometimes abstracts) from recent issues of dozens of journals in the health sciences; an "Instructions to Authors" feature, which provided users with links to sites containing the editorial/publication guidelines for hundreds of journals in the health sciences; and a "New Books" feature, which provided users with graphic and textual information about selected recent additions to the Library's collection.

- **Workflow**

Incorporation of order-processing duties into the former Cataloging Assistant's workflow (necessitated by the permanent reduction in full-time staff previously noted) resulted in a more logical division of technical service duties and was achieved with minimal training, in part because of many aspects the Library's online acquisitions module are related to the online cataloging module. The ordering process also continued to be streamlined and simplified in FY 1995/96 by utilizing more standing purchase orders (which reduced paperwork) and by diverting more business to vendors with Internet/World Wide Web accessible online ordering systems (which also reduced paperwork and resulted in faster turnaround times).

- **Conspectus Project**

Work on the initial portion of the OhioLINK conspectus project, a comprehensive collection assessment project involving all member libraries, was completed between September, 1995 and November, 1995. Participants were required to input evaluative collection data on the first three subject areas under review -- business, music, and the physical sciences -- into a special software program and then forward the files to the OhioLINK office. Printed reports which consolidated all the libraries' data were subsequently made available to participants for review. The long-range goal of the project is to reduce duplication of holdings and facilitate cooperative collection development among the OhioLINK libraries by identifying each needs and subject strengths of each.

Collection Maintenance

The ongoing book-weeding project was not completed as planned during FY 1995/96 mainly due to time constraints. However, work on the project did proceed (slowly but surely!) and by the end of the fiscal year, about half of the circulating collection had been reviewed and 1,658 books removed because they were deemed out-of-scope, outdated, and/or of no historical value.

In the spring of 1996, initial work was begun on another major collection maintenance project involving weeding and rearranging the materials in the Library's Special Collections Room. In addition, short-range and long-range plans were developed for repairing and redesigning the Room's shelving and display units.

Cataloging

The cataloging workflow continued to be fairly stable in FY 1995/96 and productivity remained high, particularly noteworthy since in mid-fiscal year the former Cataloging Assistant was assigned additional acquisitions duties. Overall costs decreased for the third year in a row.

- ***Statistics***

  A total of 1,797 books, non-print items, and course reserve reprints were cataloged or recataloged in FY 1995/96, and a total of 1,658 books were "un-cataloged" (i.e., removed from the collection and discarded). In addition, nearly 1,700 serials were recataloged in FY 1995/96. The cost for OCLC access and services related to cataloging decreased significantly -- from about $10,000 to around $7,000 -- mainly due to revisions in the OCLC pricing structure. Overall, the total amount spent on all OCLC-related services, including acquisitions, cataloging, serials control, and interlibrary loan, decreased from $17,100 in FY 1994/95 to $15,400 in FY 1995/96.

- **Projects**

  A number of cataloging projects were completed or initiated in FY 1995/96 that resulted in improved access to the Library's collection and/or a better quality catalog, including the following:

  MCO Theses & Dissertations. Work on recataloging all of the 300+ MCO theses and dissertations in the Library's collection was finished in September 1995. About two-thirds of the items had been recataloged during the previous fiscal year. The call number on each was changed so that all MCO theses and dissertations now appear together in the book stacks in order by type of degree and year written. Previously, they were assigned classification numbers based on subject (not form) and were thus scat-

tered throughout the collection. The individual bibliographic records for each item were retained in the catalog, and all were enhanced, improved, and/or corrected.

Consumer Health Books. Nearly 300 consumer health books were pulled from the shelves and recataloged in November, 1995. An identical subject heading (**Health--popular works**) was added to each book's bibliographic record to permit quick retrieval of all consumer health materials when searching the catalog. In addition, a label reading **CONSUMER HEALTH** was placed on the spine of each book to facilitate locating consumer health materials when browsing the stacks.

NIDA Research Monographs. About 100 monographs from the National Institute on Drug Abuse research series were pulled from the stacks and recataloged in December, 1995. The call number on each was changed so that all the monographs now appear together in the book stacks, facilitating both browsing the series and locating particular monograph numbers.

Medical Devices. Bibliographic records for about 200 historical medical devices owned by the Library were loaded into the online catalog. However, the records were suppressed from public view pending a decision regarding where and if to publicly display the items.

Call Numbers. For the sake of consistency and to reflect actual current cataloging practices, the call number fields on about 6,000 bibliographic records in the online catalog were edited and the decimal point in the "Cutter" portion of the classification number removed.

Vertical File. At the request of the Department of Information Services, policies and procedures for cataloging and maintaining a pamphlet file of consumer health materials were developed. It was mutually agreed that Information Services would be responsible for acquiring and weeding the materials, and that Bibliographic Control would set up and maintain a single bibliographic record in the catalog for the file, adding and subtracting subject headings as needed.

Serials

For the second consecutive year, the Library's serials budget remained more or less static, which again translated into a significant decrease in the number of current titles due to inflation. The quality, accuracy, and currency of serials data in the Library's catalog continued to improve in FY 1995/ 96, and steady bindery shipments helped maintain order in and access to the journal stacks. By June, 1996, work preparing a portion of the bound journal collection for removal to an offsite storage facility was about half-completed.

- ***Cost & Number of Subscriptions***

A total of $464,921 was spent on Library journal subscriptions in FY 1995/96, $6,000 of which came from a special Dean's Office fund. Thus, while total serial expenditures increased slightly from the previous fiscal year (+2.2%), the amount actually spent by the Library remained about the same (+0.9%). Unfortunately, journal inflation rates continued to be anything but static: the average price per title for academic medical libraries increased 10.4% between 1994 and 1995 and another 16.1% between 1995 and 1996. (The total average cost per title increased **53.0%** between 1992 and 1996.)

To offset inflation, the Library was again forced to cut the number of its current subscriptions in FY 1995/96, which fell from 1,183 to 1,055. See table directly below and the **COLLECTION COSTS** table at the end of this section for totals, comparisons, and averages.

COST & NUMBER OF JOURNAL SUBSCRIPTIONS, 1994-1996

	FY 1995/96	FY 1994/95	% Change
EXPENDITURES	$464,921	$454,937	+2.2%
NO. OF TITLES	1,055	1,183	-10.8%
Paid	1,044	1,173	-11.0%
Free	11	10	+10.0%
Added	13	14	-7.7%
Cancelled	136	89	+51.7%
Discontinued*	5	15	-66.7%

* No longer published

Between FY 1988/89 and FY 1995/96, the total amount spent by the Library on serials increased $93,346 (+25.1%). However, the average cost per title increased by around 10% a year; thus, the total number of subscriptions that the Library could afford in FY 1995/96 decreased by 1,038 (-49.9%). See tables directly below and the **PAID JOURNAL SUBSCRIPTIONS** and **JOURNAL BUDGET VS. INFLATION** graphs at the end of this section for annual totals, changes, and comparisons.

JOURNAL EXPENDITURES, 1989-1996

FISCAL YEAR	AMOUNT SPENT	PERCENT CHANGE
1988/89	$371,575	
1989/90	$408,060	+9.8%
1990/91	$458,839	+12.4%
1991/92	$454,381	-1.0%
1991/93	$426,852	-6.1%
1993/94	$452,101	+5.9%
1994/95	$454,937	+0.6%
1995/96	$464,921	+2.2%
NET CHANGE	**+$93,346**	**+25.1%**

NUMBER OF PAID JOURNAL SUBSCRIPTIONS, 1989-1995

FISCAL YEAR	NO. OF TITLES	PERCENT CHANGE
1988/89	2,082	
1989/90	1,787	-14.2%
1990/91	1,958	+9.6%
1991/92	1,810	-7.6%
1991/93	1,258	-30.5%
1993/94	1,277	+1.5%
1994/95	1,173	-8.1%
1995/96	1,044	-11.0%
NET CHANGE	**-1,038**	**-49.9%**

- *Titles Cancelled*

The Library cancelled 135 serials effective with the calendar year 1996. The following titles were selected for cancellation after consulting current issue usage data, price data, citation analysis data, faculty members, and the Library Advisory Committee:

ASHA / Magazine of the American Speech-Language-Hearing Association
Acta Obstetricia et Gynecologica Scandinavica
Acta Oncologica
Allergy
American Journal on Mental Retardation
American Journal of Veterinary Research
American Journal of Sociology
Anatomy and Embryology
Anatomical Record
Anesthesiology Clinics of North America
Anti-Cancer Drug Design
Applied Microbiology and Biotechnology
Archives of the Foundation of Thantology
Archives of Toxicology
Atherosclerosis
Australian Nursing Journal
Biochemical Genetics
Bottom Line: Managing Library Finances
Brain and Development
British Journal of Educational Psychology
British Journal of Ophthalmology
British Journal of Radiology
British Veterinary Journal
Bulletin of Environmental Contamination and Toxicology
CD-ROM Professional
Canadian Journal of Experimental Psychology
Canadian Journal of Ophthalmology
Chemical Reviews
Clinical and Experimental Pharmacology and Physiology
Clinical Nuclear Medicine
Clinics in Perinatology
Current Contents: Social and Behavioral Sciences
Current Pulmonology
Current Microbiology
Current Problems in Cardiology
Current Problems in Obstetrics, Gynecology, and Fertility
Current Problems in Pediatrics
Dental Clinics of North America
Developmental Psychobiology

Environment
Enzyme and Protein
Epilepsy Research
Experimental Hematology
European Journal of Endocrinology
European Journal of Disorders of Communication
European Urology
Eye
Gan to Kagaku Ryoho: Japanese Journal of Cancer and Chemotherapy
Genetical Research
Hearing Research
Hematologic Pathology
Hormones and Behavior
Hormones and Metabolic Research
International Journal of Clinical and Experimental Hypnosis
International Journal of Clinical Pharmacology and Therapeutics
International Journal of Peptide and Protein Research
International Journal of Psychoanalysis
International Surgery
Japanese Journal of Pharmacology
Japanese Journal of Physiology
Joint Commission Journal on Quality Improvement
Journal of Autonomic Pharmacology
Journal of Biological Rhythms
Journal of Child Psychology and Allied Disciplines
Journal of Clinical Gastroenterology
Journal of Comparative Psychology
Journal of Contemporary Psychology
Journal of the Experimental Analysis of Behavior
Journal of Hazardous Materials
Journal of Homosexuality
Journal of Inflammation Research
Journal of Inherited Metabolic Disease
Journal of Intellectual Disability Research
Journal of Pediatric Ophthalmology
Journal of Periodontology
Journal of Pharmacy & Pharmacology
Journal of Psychoactive Drugs
Journal of Psychosomatic Research
Journal of Submicroscopic Cytology and Pathology
Journal of Tropical Medicine
Journal of Zoology
Journal of the American Academy of Psychoanalysis
Journal of the American Podiatric Medical Association
Journal of the Association of Official Analytical Chemists

Journal of the Royal Academy of Medicine
Language and Speech
Literature and Medicine
Lymphology
Mechanisms of Development
Medical History
Medical Journal of Australia
Medical Problems of Performing Artists
Medicine and Sport Science
Memory and Cognition
Mental Retardation
Metabolic Brain Disease
Neuropsychologia
Ophthalmolgica
Paraplegia
Pediatric Radiology
Pediatric Research
Perception and Psychophysics
Pharmacological Research
Physiology of Behavior
Progress in Biophysics and Molecular Biology
Progress in Cardiovascular Diseases
Prostaglandins, Leukotrienes, and Essential Fatty Acids
Psychological Abstracts
Quarterly Journal of Nuclear Medicine
Radiation Research
Radiologic Technology
Research in Veterinary Science
Resource Sharing and Information Networks
Respiration Physiology
Scandinavian Journal of Psychology
Scandinavian Journal of Thoracic and Cardiovascular Surgery
Scanning Microscopy
Science and Public Policy
Seminars in Nuclear Medicine
Sociological Methods and Research
Somatosensory and Motor Research
Special Care in Dentistry
Surgical Neurology
Talanta
Tissue and Cell
Tissue Antigens
Toxicon
Ultrasonics
Veterinary Micrology

Veterinary Research Communications
Vision Research
Yearbook of Endocrinology
Yearbook of Neurosurgery
Yearbook of Psychiatry and Applied Mental Health
Yearbook of Urology

- *Titles Added*

A limited number of new journal subscriptions were added in FY 1995/96, including subscriptions to the World Wide Web versions of three journals which the Library continued to receive in print as well. (These three are included as "new" titles because the publishers of each required the Library to subscribe/register separately, and one required an additional payment.) Following is a list of the Library's new serial titles for FY 1995/96:

Clinician Reviews
European Respiratory Journal
Evidence-Based Medicine
Journal of Biological Chemistry Online
Journal of Molecular Biology Online
Journal of Occupational Science
Journal of Orthopaedic Trauma
Journal of Pediatric Nursing
JAAPA: Journal of the American Academy of Physician Assistants
Nature Medicine
Nucleic Acids Research Online
Nurse Educator
Science and Medicine

- **Serials Control & Processing**

Workflow & "Overflow." The transfer of acquisitions duties to the former Cataloging Assistant enabled the Serials Assistant to focus exclusively on serials tasks and projects, some of which had not consistently gotten the attention they required due to lack of staff and time constraints. However, even after transfer of acquisitions duties over to cataloging, work on major serials projects -- for example, keying in holdings information onto journal check-in records in the Library's online catalog -- progressed slower than anticipated. Unfortunately, the hoped-for "extra" time in the Serials Assistant's schedule had been quickly taken up by incorporation of duties formerly handled by the Serials/Reference Assistant and by the increased work resulting from processing the large bindery shipments that were now being regularly prepared by two

part-time students. In June 1996, approval was obtained to hire an additional part-time student during the next fiscal year to work on keying in Library journal holdings onto catalog records, as it was apparent that the Serials Assistant's schedule could not accommodate such a major project.

Usage Studies. Despite the additional processing time required, all journal issues continued to be barcoded upon check-in (and "un-barcoded" when sent to the bindery) to permit computer-based usage studies of all current titles during selected time periods. Statistics compiled from the first such study, conducted by the Access Services Department in the second half of FY 1994/95, proved useful during the FY 1995/96 journal cancellation process. A second study was conducted during the 1995/96 academic year, and the compiled data will again undoubtedly prove useful when subscription renewals are placed for FY 1996/97.

Data Enhancement & Consolidation. Work keying in retrospective holdings statement onto the check-in records of all currently received titles was almost completed by the end of FY 1995/96. In addition, corresponding changes and corrections and corrections were made to dozens of Library holdings records in the OCLC Union List subsystem. Also, nearly two-thirds of all bibliographic records in the Library's catalog for inactive serial titles were replaced with updated, more complete versions, and all order records for current and recently cancelled serials were revised to incorporate new OhioLINK-defined status codes.

- **Bindery**

The Library spent $21,041 binding 3,313 journal volumes in FY 1994/95, about 28% more than was spent in FY 1994/95. The increase was due to more volumes bound, not an increased price per volume. More volumes were bound despite a decrease in the number of current subscriptions because backlogs from previous years were still being cleared up. Another reason for the increase was because, unlike the previous fiscal year, two students worked part-time on bindery processing, and they regularly prepared bindery shipments of 300+ volumes each month beginning with October 1995.

- **Depository Project**

During the last half of FY 1995/96, significant progress was made preparing the Library's bound journal collection for partial removal to the new Northwest Ohio Regional Book Depository in Perrysburg, Ohio, scheduled to be ready in September 1996. Utilizing computer equipment and book trucks purchased with specially allocated state funds, four part-time workers began barcoding the Library's entire bound journal collection in February, 1996, beginning with the pre-1970 volumes on the sixth

floor. By June, 1996, they had created item records for almost all of the pre-1970 volumes (about 32,000).

- **Updated Subject List**

  Work on a compiling a new subject list of the Library's journals current journal titles was completed as FY 1995/96 came to a close. Production of an updated list had been delayed in part because the computer file of the most recent version, prepared in early 1993 by the previous Department Head, could not be located. In addition, various attempts to generate a subject-arranged list of current journal titles from records in the Library's online catalog were unsuccessful due to limitations of the system. Thus, the entire list had to be recreated from scratch. However, annual updates to the list will now require minimal time and effort.

Goals for FY 1996/97

- Draft written policies and procedures for all major Bibliographic Control functions.
- Oversee completion of depository project and journal collection barcoding.
- Oversee addition of holdings data to all journal records in the Library's catalog.
- Incorporate serial expenditures into the online acquisitions module.
- Complete book weeding project.
- Revise and update "Medical Links" section of Library's World Wide Web page.
- Complete reorganization and recataloging of materials in the Special Collections Room.
- Develop and implement more subject-specific allocation formulas for acquisition expenditures.

COLLECTION COSTS AND SIZE

COLLECTION COSTS				
	FY 1995/96 TOTALS	FY 1994/95 TOTALS	FY 1995/96 AVERAGES	FY1993/94 AVERAGES
Books*	$37,037	$33,099	$67.22	$109.96
Audiovisuals*	$2,044	$5,201	$78.61	$52.61
CD-ROM's*	$3,220	$4,553	$1,610.00	$1,138.25
Journal Subscriptions*	$464,921	$454,937	$445.37	$366.11
Binding	$21,041	$16,384	$6.35	$6.35
TOTALS:	**$542,263**	**$534,174**		

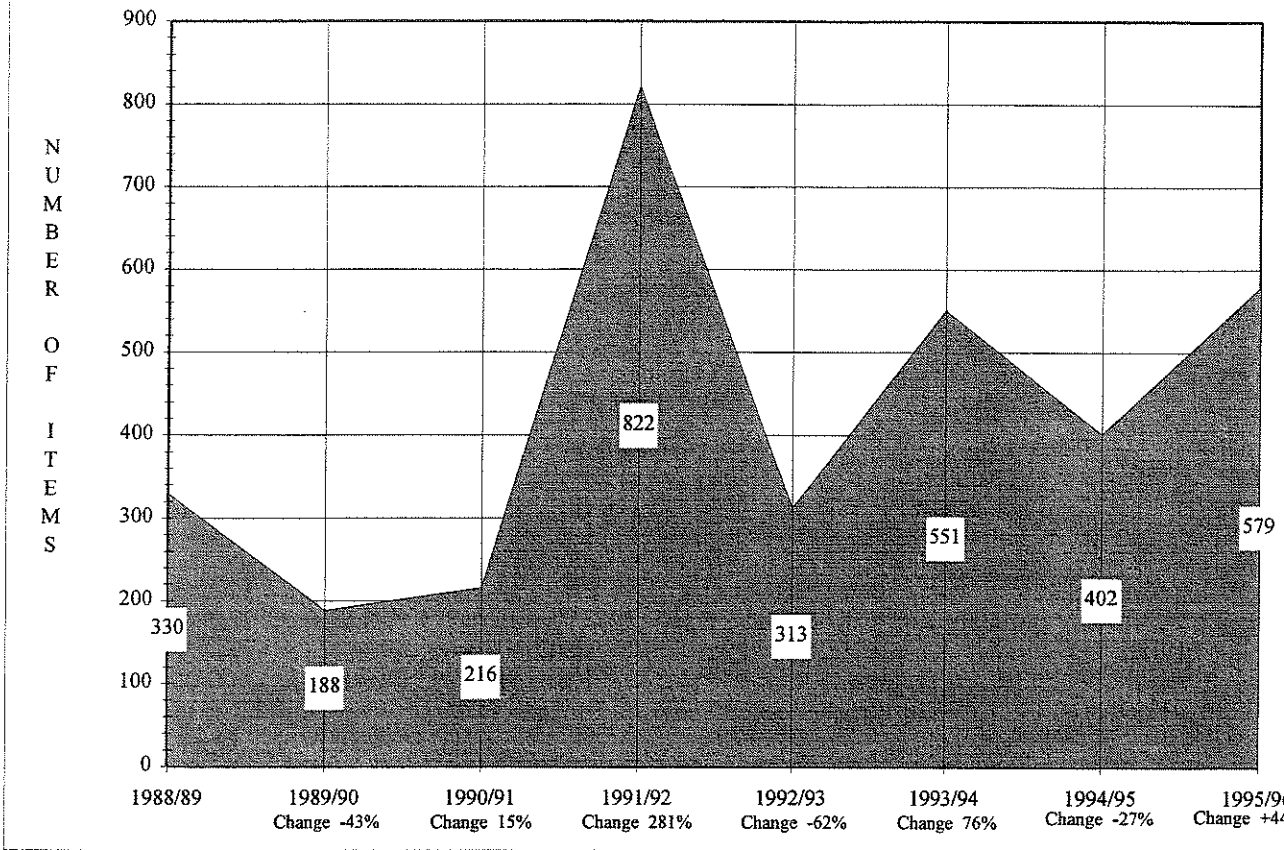
* Does not include costs associated with ordering and cataloging

COLLECTION SIZE			
	FY 1995/96	FY 1994/95	% CHANGE
BOOKS	32,508	33,397	-2.7%
AUDIOVISUALS	163	137	+18.8%
CD-ROM's	7	4	+75.0%
JOURNALS			
Total Subscriptions	1,055	1,183	-10.2%
Total Volumes*	83,123	79,810	+4.2%
TOTAL VOLUMES	**115,800**	**113,348**	**+2.2%**

*Estimated

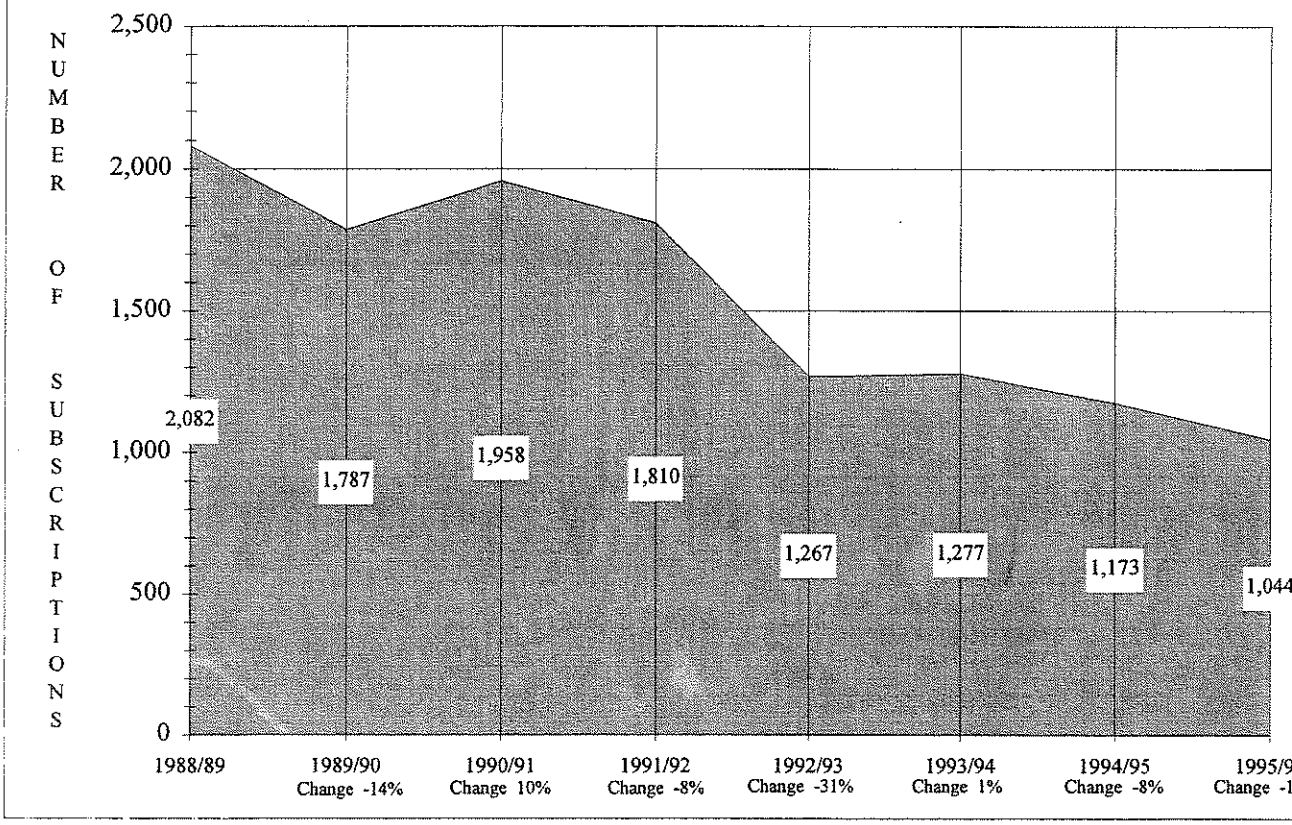
BOOKS & AUDIOVISUALS PURCHASED

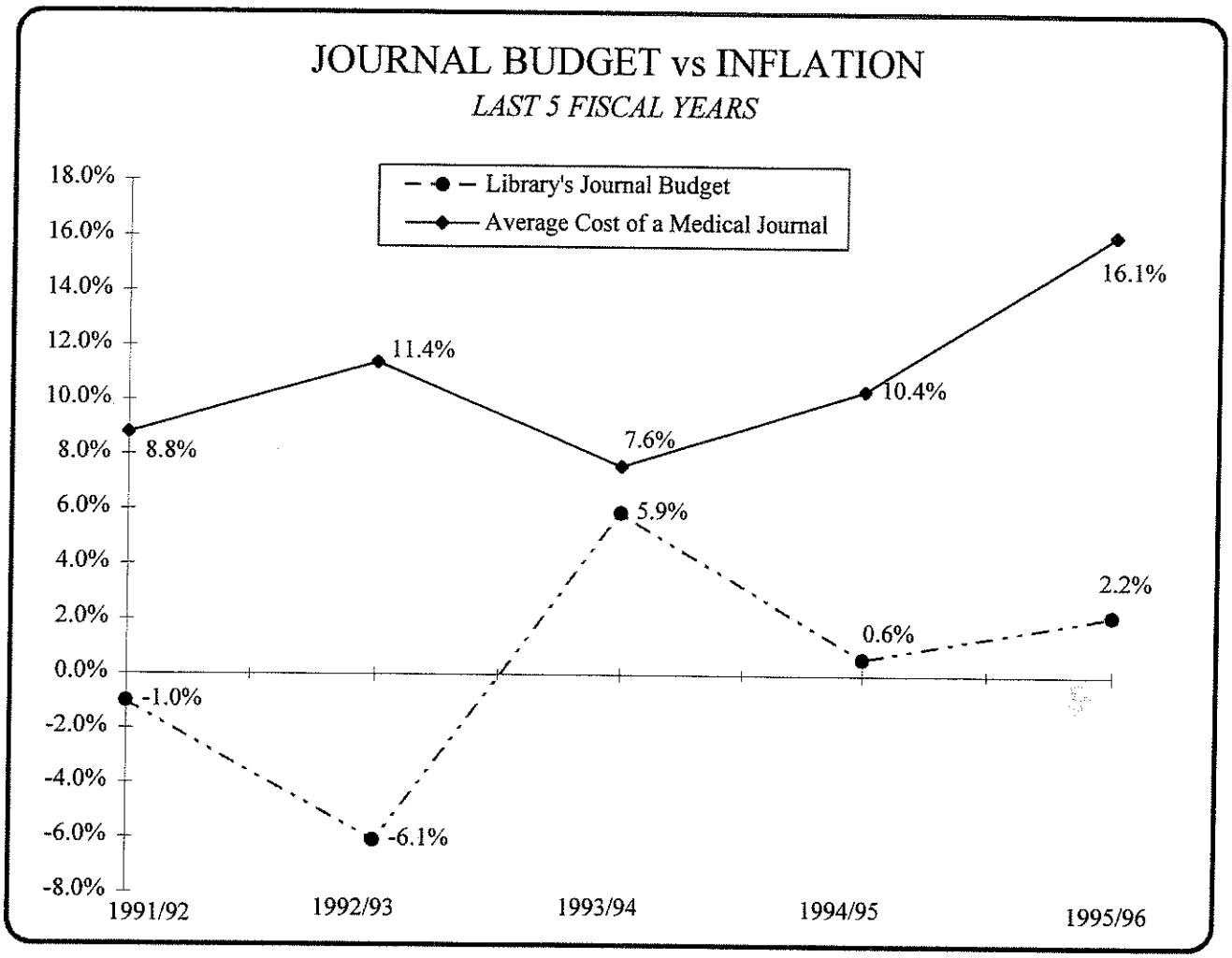
Last 8 Fiscal Years



PAID JOURNAL SUBSCRIPTIONS

Last 8 Fiscal Years





JOURNAL BUDGET vs. INFLATION

LAST 5 FISCAL YEARS

	1991/92	1992/93	1993/94	1994/95	1995/96
% Change - Average Cost per Title	8.8%	11.4%	7.6%	10.4%	16.1%
% Change - Library's Journal Budget	-1.0%	-6.1%	5.9%	0.6%	2.2%

COMPARATIVE ANALYSIS OF THE CURRENCY
OF THE MULFORD LIBRARY'S BOOK COLLECTION
(Compiled in February 1996)

Classification/ Subject		MCO No. of Books	MCO 1990-Present		OHIOLINK No. of Books	OHIOLINK 1990-Present		NLM No. of Books	NLM 1990-Present	
QS	Human Anatomy	621	56	(9.0%)	2147	342	(15.9%)	6365	472	(7.3%)
QT	Human Physiology	343	33	(9.6%)	2062	348	(16.9%)	10437	834	(8.0%)
QU	Biochemistry & Nutrition	754	51	(6.8%)	4300	765	(17.8%)	11113	1491	(13.4%)
QV	Pharmacology & Toxicology	1192	95	(8.0%)	5820	977	(16.9%)	24171	3071	(12.7%)
QW	Microbiology & Immunology	911	74	(8.1%)	3327	611	(18.4%)	8975	1265	(14.1%)
QX	Parasitology	86	3	(3.9%)	341	37	(10.9%)	1996	86	(4.3%)
QY	Clin Path & Lab Med	319	22	(6.9%)	1558	236	(15.1%)	5045	487	(9.7%)
QZ	Pathology & Pathophys	1047	83	(7.9%)	4622	892	(19.3%)	11471	1645	(14.3%)
W	Medical Profession	1484	179	(12.1%)	23395	3247	(13.8%)	28088	4399	(15.4 %)
WA	Public Health	673	110	(16.4%)	6177	1113	(18.0%)	27579	3900	(14.1%)
WB	Practice of Medicine	1050	163	(15.5%)	5908	1103	(18.7%)	26748	3499	(13.1%)
WC	Communicable Diseases	606	83	(13.7%)	2375	335	(14.1%)	11608	1288	(11.1%)
WD	Metab/Defic/Immun Diseases	337	17	(5.0%)	2749	547	(19.9%)	6123	1444	(23.6%)
WE	Musculoskeletal System	1205	87	(7.2%)	5098	955	(18.7%)	14040	2205	(15.7%)
WF	Respiratory System	487	34	(7.0%)	2314	479	(20.7%)	8814	903	(10.2%)
WG	Cardiovascular System	1430	67	(4.7%)	5052	994	(19.7%)	13371	2139	(16.0%)
WH	Blood & Lymphatic System	547	19	(3.8%)	1796	302	(16.8%)	4981	668	(13.4%)
WI	Gastrointestinal System	808	42	(5.2%)	2843	547	(19.2%)	10550	1300	(12.3%)
WJ	Urogenital System	642	37	(5.8%)	2142	379	(17.7%)	6583	869	(13.2%)
WK	Endocrine System	614	21	(3.4%)	2441	333	(13.6%)	6044	718	(11.9%)
WL	Nervous System	2060	96	(4.7%)	6815	1380	(20.2%)	17580	2919	(16.6%)
WM	Psychiatry	2087	94	(4.5%)	10662	2174	(20.4%)	33868	6984	(20.6%)
WN	Radiology	511	23	(4.5%)	2397	373	(15.6%)	7190	937	(13.0%)
WO	Surgery	933	64	(6.8%)	3580	615	(17.2%)	11839	1234	(10.4%)
WP	Gynecology	607	33	(5.4%)	2680	546	(20.4%)	8502	1133	(13.3%)
WQ	Obstetrics	542	26	(4.8%)	2320	438	(18.9%)	8136	1042	(12.8%)
WR	Dermatology	321	26	(8.1%)	1191	256	(21.5%)	4502	536	(11.9%)
WS	Pediatrics	1215	76	(6.3%)	5062	967	(19.1%)	16612	2323	(14.0%)
WT	Geriatrics & Chronic Disease	447	22	(4.9%)	2067	439	(21.2%)	4673	986	(21.1%)
WU	Dentistry & Oral Surgery	360	7	(1.9%)	4026	389	(9.7%)	9839	1209	(12.3%)
WV	Otolaryngology	352	13	(3.7%)	1545	267	(17.3%)	5348	678	(12.7%)
WW	Ophthalmology	613	14	(2.3%)	2723	488	(17.9%)	8765	1040	(11.9%)
WX	Hospitals & Health Adminis	488	35	(7.2%)	3234	595	(18.4%)	11944	1477	(12.4%)
WY	Nursing	1998	203	(15.1%)	8932	1919	(21.5%)	13877	2603	(18.8%)
WZ	History of Medicine	952	31	(3.3%)	5021	361	(7.2%)	47487	1760	(3.7%)
ZW	Medicine / Bibliography	218	54	(24.7%)	1515	161	(10.6%)	6659	559	(8.4%)
	TOTALS	**28732**	**2083**	**(7.2%)**	**150237**	**25910**	**(17.2%)**	**460973**	**60044**	**(13.0%)**

Computer Services

COMPUTER SERVICES

James F. Garrett, Computer Services Librarian

Fiscal Year 1995/96 closely followed the pattern established over the previous few years: steady progress in key areas (notably Internet services and online databases) while funding for computer equipment continued to decline.

OSLER

The growing pains so evident the first years of OSLER's existence appear to have lessened. Service across all available modules is fairly stable and the changes required when resources are added are less discernible.

OhioLINK, however, continues to be very much a work in progress, particularly in the area of document delivery. PCirc (the patron-initiated circulation module) is under constant revision as OhioLINK libraries put theory into practice. The OhioLINK bibliographic software vendor released a full upgrade this last year -- from Release 8.1 to Release 9 -- to implement many of the suggested PCirc improvements. While this upgrade is a definite step forward, the circulation departments in all participating libraries are still dealing with an assortment of problems.

The much-heralded PowerPages project, another experiment in document delivery, was implemented last year but has had little impact at MCO. Through this module, patrons searching certain citation databases can order full-text reprints while still online. In theory, this addition could have tremendous impact on how our patrons obtain documents, but the only databases supported at this time are too general for most MCO patrons and so use is far less than at other institutions.

Perhaps the change most obvious to our users this year would have been the OSLER menu presentation. The latest software release includes a rudimentary design module, which allows much more control over how menu choices are displayed. With this addition the library was able to reorganize the OSLER menus, providing a less cluttered, more appealing interface. This approach also allowed the library to insert some Internet offerings of local interest directly into the standard OSLER menu.

Preparations for more profound changes in access to resources also began this last fiscal year. Each OhioLINK member library received a prototype World-Wide Web server to allow Web access to the local catalogs. Mulford Library was one of several libraries that developed working models to explore the possibilities of a Web approach for in-house resources. The Web-based catalog has been available for several months but has not been advertised because of its preliminary nature.

This movement to the Web is being mirrored throughout OhioLINK. Recently, the statewide OhioLINK Central Site adopted a Web front end for its catalog (which numbers in the millions of records) that parallels and enhances the standard terminal approach. And various current and prospective OhioLINK database vendors are moving to Web interfaces to supplement or replace existing approaches. Of particular significance to MCO is the Ovid software vendor, which recently unveiled a Web interface for its health sciences databases.

Computer Equipment/Software

Computer related purchases took another sharp decline this past year, showing a 23 percent overall reduction in expenditures as compared to FY 94/95 and a 68 percent drop over FY 93/94. State funds are used to support equipment for students, faculty and other library users, while the staff relies on library produced income for its equipment.

Library patrons were hardest hit, with virtually no new equipment purchases made to replace the underpowered and obsolete PCs currently in use. It is ironic that the library, supposedly a leader in information management, does not have a single public-use PC capable of browsing the World Wide Web for its Online Resources Room.

Only one change was made to the public computer environment last year. Aware that some of our patrons prefer using the Apple Macintosh, the library placed an existing Mac in the primary computer area. Based on anecdotal evidence, it appeared that the Mac received a significant amount of use, prompting the library to place a second Mac in the same general area.

Library staff fared somewhat better in acquiring equipment, although the expenditure level was still significantly below previous years. Purchases included two desktop computers to accommodate newly hired employees; a networked color inkjet printer; and a large-screen monitor for teaching and demonstrations. All library staff have the minimum PC configuration to conduct normal office duties, but only a handful are capable of connecting to the MCO Website.

Ongoing Projects

World-Wide Web -- The big news in computers for the past year has been the World-Wide Web explosion, so it is no surprise that Computer Services spent considerable time on Web projects. The library component of the MCO Web site now includes over 200 individual pages. In an effort to stay fresh, the Web pages were completely redesigned last year to put more emphasis on design and graphics.

As before, the library Web site includes the expected operational information, such as phone numbers and hours, but several new features were added, including pages for:

- Library Services -- the online version of some of our standard forms, which allow patrons to request books and articles, as well as forms to pose reference questions and request literature searches.
- New Books -- scanned images of items from New Book Shelf, complete with full tables of contents. This page is jointly produced with Bibliographic Control.
- Instructions to Authors -- an ambitious project to build a comprehensive list of publishers on the Web who have detailed their rules on submitting manuscripts. This resource currently has over 1000 entries and is being jointly produced with Bibliographic Control.
- Search Assistant -- a tool to give users a hand in finding information using library electronic resources.
- OSLER WebPac -- the Web version of the Mulford Library electronic catalog.
- What's New -- a quick reference on any new additions to the library Web site.
- Site Index -- a complete rundown on all of the main pages, arranged alphabetically and by subject.

On occasion, the library also ventured into less traditional non-bibliographic areas. One example was the Mulford Library art exhibit last spring by Paul Brand, Associate Professor in the Department of Physiology and Molecular Medicine. A parallel show consisting of selected photographs of the paintings went up on the Web, allowing computer users from all over the world to sample the exhibit.

Tutorials -- Prototype tutorials on how to use OSLER were made available to library patrons this last year. The tutorials explained basic search techniques in the electronic catalog and health-sciences databases and showed how to print results. No additional modules are being developed until the library is able to determine the effectiveness of this approach.

CD-ROM Databases -- After several years of effort, the library was successful in engaging Information Systems to mount four CD-ROM databases. The databases are all available on WinServe, the IS-developed application menu, and include:

- Child Abuse & Neglect
- The Electronic Library of Medicine: Maximum Access to Diagnosis and Therapy
- Harrison's Plus
- Select Animal Models of Human disease

Regional Cooperative Library Warehouse -- The building is completed and nearly ready for use. While Computer Services continues to be peripherally involved, the project has largely moved into the realms of Bibliographic Control.

Medical Electives Database -- The medical electives database is now available to all OhioLINK institutions. The project involves all Ohio higher education medical schools and was coordinated by George Nowacek, director of Educational Research and Development, Office of Medical Education. Computer Services provided technical support during the preliminary database design stages.

Item	Qty	Unit Price	Extended Price
SOFTWARE			
Apple AtEase	2	44.00	88.00
Adobe Photoshop 3.0 for Windows	1	535.00	535.00
IBM Antivirus v2.4	10	39.95	399.50
Netscape SmartMarks	1	24.95	24.95
OmniPage Pro for Windows	1	449.00	449.00
PowerPrint software	2	94.98	189.96
SUBTOTAL			**1686.41**
COMPUTERS			
Gateway P5-100 desktop computer (16MB RAM)	1	2469.00	2469.00
Gateway P5-100 desktop computer (32MB RAM)	1	3109.00	3109.00
SUBTOTAL			**5578.00**
PRINTERS			
Apple ImageWriter II	1	388.00	388.00
Epson dot-matrix printer	1	282.95	282.95
HP Deskjet 1600c printer	1	1295.00	1295.00
Panasonic dot-matrix printer	1	243.50	243.50
SUBTOTAL			**2209.45**
MISCELLANEOUS			
Apple 6-foot cable	1	11.00	11.00
Apple 10-foot cable	1	15.00	15.00
Data patch cable	2	3.60	7.20
DEC cable adapter	3	25.00	75.00
Demco 4-tier mobile computer workstation	1	179.95	179.95
HP Scanjet 4c scanner	1	890.00	890.00
Kensington surge suppressor	5	95.00	475.00
Keyboard cable adapter	4	6.00	24.00
Manual print switcher	1	19.95	19.95
NEC 21-inch monitor	1	2169.00	2169.00
Parallel cable adapter	2	6.99	13.98
PowerPrint auto-detect print switcher	2	49.00	98.00
Robotics 28.8 internal modem	1	189.00	189.00
Samsung 17-inch SVGA monitor	1	675.00	675.00
Seagate 1GB hard drive	1	289.00	289.00
Serial auto-detect print switcher	2	54.95	109.90
Serial cable	8	7.10	56.80
SIMM, 4MB	2	78.00	156.00
SIMM, 8MB	3	176.00	528.00
Turtle Beach Tropez sound card	1	193.67	193.67
Yamaha PC speakers	1	75.00	75.00
SUBTOTAL			**6250.45**
TOTAL			**15,724.31**

Computer Learning Resource Center

COMPUTER LEARNING RESOURCE CENTER

Jerome A. Levin, Ph.D., Director
Jeffrey A. Jablonski, Ph.D., Assistant Director
Ruth Jacobs, Computer Laboratory Technician
Anne Trinchero, M.Ed., Computer Laboratory Technician
Ali Mohamed, Student Computer Assistant
Mamoud Mohamed, Student Computer Assistant
James Patrick, Student Computer Assistant

Introduction

This report is for the ninth year that the Computer Learning Resource Center (CLRC) has been in operation. The CLRC, a division of the Raymon H. Mulford Library, is an open access computer laboratory providing computer resources, support, and training for students, faculty, and staff.

Specifically, the CLRC provides access to and training on the following computer-related resources:

- Computer hardware, both Macintosh and DOS/Windows-compatible computers;
- Computer peripherals: laser printers, graphics and text scanners, film recorders, computer projection equipment;
- General productivity software: word processing, databases, spreadsheets;
- Illustration graphics software and clipart libraries;
- Research analysis tools: database software, statistical and image analysis software;
- Multimedia learning software for healthcare;
- Email and Internet databases and resources including World Wide Web access;
- Exam grading software and hardware (bubble-sheet scanner) which can also be used for the analysis of survey forms.

The CLRC has a training room (for up to 12 students) that can be used for conducting hands-on computer and information management classes. Additionally, this room is equipped with 3 combination television/VCR units that can be used for self-study using the CLRC's video tape library of computer-related training materials.

Educational Activities/Services

Computer Applications in Medicine

This academic year was the first that the CLRC did not offer the *Computer Applications in Medicine* course. Previously, all first-year medical students were required to pass a series of 3 or 4 hands-on proficiency tests concerning basic computer operations and

applications. Similar proficiency tests for word processing for both Nursing and Physical Therapy students were also dropped.

The most immediate effect of dropping these testing requirements was that the CLRC staff had more time to spend assisting students, faculty, and research staff. In previous years, administering, grading, and recording these tests (which usually numbered in excess of 800) taxed both the CLRC's computer and personnel resources to the maximum. This drain on limited resources resulted in frustration for both students and the CLRC staff: Students often could not access a computer to do *real* work and the staff were often too busy with the testing to adequately respond to those patrons who needed their assistance.

Of all the changes that took place during the 1995–96, dropping these test requirements had the greatest impact upon the CLRC staff's ability to improve the quality of service offered to its patrons. Students using the CLRC also seem to have a more positive perception of the CLRC as a place where they can go to receive assistance with their computer problems rather than as a place where they are forced to take a series of tests.

Microsoft Word Workshop for Nursing and Physical Therapy

In lieu of the formal testing requirements for Physical Therapy and Nursing Students, Drs. Levin and Jablonski offered nine sessions of a three hour hands-on workshop in the use of Microsoft Word 6.0. This workshop was administered to 38 Nursing students and 42 Physical Therapy students during the fall. The workshop was given just prior to a writing assignment for both groups.

The response to these workshops was very positive as indicated by students' ratings on a workshop evaluation sheet which the students filled out at the end of each session. There were 8 statements on the evaluation which the students ranked from poor to excellent. The content of the statements ranged from "value of the workshop" to "the effectiveness of the presentation." All items on the assessment were rated close to excellent. Student comments indicated that they appreciated the hands-on experience and the fact that the material covered was task-oriented.

The only negative feedback which received was from a few Nursing students who resented having to attend the workshop despite their prior expertise with the software. Attendance was voluntary for the Physical Therapy students and therefore only those with limited experience with Microsoft Word signed up.

Graduate School Course

During the summer of 1995, 23 doctoral students were enrolled in the course *Computer Applications in Biomedical Research*. Over the 10 week course the students worked with various computer applications and their use in support of biomedical research. The students also viewed how different faculty used special computer applications in their research. Each student was required to successfully complete 4 hands-on proficiency tests and also prepare a final project consisting of a poster presentation using the software applications and skills learned throughout the course.

Support for Other Graduate School Courses

The CLRC staff continues to provide support for faculty who are teaching statistics courses using CLRC software. This involves considerable technical support to make sure that everything is set up properly for the classes, and in providing classroom demonstrations of the software. In addition, our staff support the students taking the classes when they come to the CLRC to work on assigned exercises. Cheryl Bourginon (School of Nursing) teaches an introductory statistics class for about 40 students in the fall quarter and an advanced class for about 15 students in the spring. Her students use the CLRC to access the SPSS statistical package. Ms. Bourginon also used the CLRC's projection system for class presentations.

Computer Software, Hardware, and Peripherals

State of the Equipment in the CLRC

Due to budgetary constraints, much of the equipment in the CLRC is rapidly becoming obsolete or unreliable due to age. We currently have about 18 working Macintosh computers and 15 IBM/Windows compatibles available for general patron use.

Of the 18 Macintosh computers, 10 are Power Macs (most about 2–3 years old) and eight 68K machines (5 years or older). Also there are 15 DOS/Windows compatibles available for general patron use. All of these machines are slow 486 computers running at 25–36 MHz. and are 3 years of age or older. All of them are also limited to 4 MB of RAM.

What this means in terms of the CLRC can best be illustrated by the following limitations: Of the 33 machines available for general patron use, only the 10 Power Macs are capable of providing Internet access to the World Wide Web. (Two of these Power Macs are reserved for running educational software and therefore there are only 8 machines available for actual Web access). The older Macs and none of the PC DOS/Windows are currently capable of running a Web browser such as Netscape. Also none of the PC's is capable of running the new Windows 95 operating system which many of our patrons are already running at home or at others sites on campus. In addition, all the PC's and the older Macs run our current version of Microsoft Office products (version 6.0) marginally at best due to speed and memory limitations.

Another area of concern is that our primary Apple laser printer (a LaserWriter 810 Pro) broke early in the year. Luckily, we were able to replace it using our Apple Funds (as described below under *New Equipment Purchases*). It was decided not to have the broken printer repaired since the estimated repair cost would be in excess of $1500. Currently, the only backup printer for Macintoshes that we have is a 4 year old unit that is being used in our office area.

New Equipment Purchases

The only funding available for the purchase of new equipment came from MCO's Apple Computer Purchase Program, which the CLRC administers. During the previous two

years Apple had credited the CLRC for the purchase of each Apple computer purchased through the program. This credit was to be used to either cover administrative expenses for running the program or for the purchase of additional equipment which could be displayed in the CLRC to potential purchasers. The total credit accumulated over a 2 year period was about $7,000. This money was used to purchase a replacement laser printer, a color inkjet printer, and a two new Power Macintoshes. This funding program has been discontinued and therefore the CLRC will not receive future funds from this source.

Software

No major purchases or upgrades to existing software were made due to a lack of funds. With major upgrades to most software packages now coming at a frequency of less than a year, much of the CLRC's software is rapidly becoming obsolete. This causes great difficulty and frustration for the CLRC's patrons since many of them have home or access to other computers with newer versions. When a patrons saves a file with a new version of a software package, they are not usually able to access it with an older version of the same package. Increasingly CLRC patrons are not able to open files that they have created elsewhere. Also, as there are minor upgrades to any of the system software, it is vital to upgrade all existing packages to ensure that compatibility problems do not arise.

Our selection of educational software offerings for both the Mac and PC platforms continues to be scant. There are many new educational healthcare-related software packages available for both the Mac and DOS/Windows platforms for under $100.

Currently the CLRC does not have any high-end graphics packages (such as Adobe Illustrator or Photoshop) for its PC DOS/Windows machines. The current scientific graphing package for the PC's either needs upgrading or replacing since it will not work with our current printers. The CLRC is still running two badly outdated DOS packages: WordPerfect and Lotus 123. Support for these two packages should either be eliminated or they should be upgraded to their Windows counterparts. The only database program (FileMaker Pro) for Windows is several versions out of date. Finally, there is a need to purchase a commercial virus protection package and automatic update service for the DOS/Windows platform. A public-domain program is currently being used, but with the increasing frequency of new viruses, an automatic update service is becoming essential.

On the Macintosh side, several copies of the SPSS statistical package are needed since it is currently only available on the PC machines. The Mac fileserver software needs to be upgraded—currently we are running a non-native version of the software on a Power Mac. This means that our Mac file sharing services are not running at optimal speed. In addition, the current version of our Mac front-end software (At Ease) is also two versions out of date. This front-end software allows for easy program selection by patrons and also provides vital protection against tampering with the computer's primary systems.

Other CLRC Services

Exam Grading Support

The CLRC continues to provide faculty and staff with access to the hardware and software used for grading all multiple choice examinations generated on campus. In past years, the CLRC also supplied scanner forms to academic departments at no cost. However, due to budgetary constraints, this practice was discontinued and the forms were made available to departments through central stores.

To aid faculty and support staff in their use of the scanning equipment and gradebook software, Dr. Levin conducted a training workshop before the beginning of the fall term.

Loaning Equipment

The CLRC continued to loan its portable notebook computers to faculty who need them for working off campus. We also loaned our computer projection equipment to faculty and students who needed to make group demonstrations of software products or present a seminar with computer generated slides. The all-in-one projector (Infocus 550) was only available for use on campus.

Similar to the CLRC's desktop computers, the CLRC's portable computers that are available for loan are also rapidly becoming obsolete. The two IBM portables are slow 386 machines with monochrome displays and the three Macintosh portables are slower 68K machines (two with monochrome displays and one with a color display).

Film Recorder

The CLRC has a film recorder (Montage II) for converting on-screen presentation via a program such as Microsoft PowerPoint to a conventional 35mm slide presentation. This resource is provided as a free service to those who wish to create their own slide presentations. (Patrons must provide their own film and pay for film processing.)

During the 1995–96 operating year, more than 380 CLRC patrons used the Montage to produce almost 9,000 slides. If these slides had been taken to an agency off campus (such as Kinko's) to be converted it would cost $8.95/slide. Therefore the CLRC has saved MCO (its employees and students) over $80,500 by offering this service.

Administering the Higher Education Purchase Plan

MCO has a contract with Apple Computer which provides a substantial discount for institutional and personal purchases of Macintosh computers. This plan supports the long term goal of having all students own a computer and using this technology as the primary form of information exchange and teaching. Supervising this plan requires a considerable amount of time from the CLRC staff for counseling potential purchasers, preparing and updating price lists and keeping current on the features of the available equipment. This plan allows us to purchase single units of all new computers and peripherals at reduced prices which has substantially decreased the cost purchasing hardware for the CLRC.

CLRC Patron Usage

To help gauge CLRC usage, a *people* counter was installed at the beginning of the 1995–96 operating year. The head counts were then summed for each month and an average daily head count was computed. (A *fudge factor* for the CLRC staff entering and leaving the CLRC was also taken into account.) The number of patrons entering the CLRC varied from an average low of 77 per day in July to a high of 422 per day in April. The average daily usage for the CLRC computed on an annual basis is 195 patron entrances per day.

MCO Student Computer Survey

Introduction

During March 1996, a survey of all MCO students was conducted. The survey was developed by the Student Computer Advisory Committee, an ad hoc committee composed of student representatives from all four schools and the Director and Assistant Director of the CLRC. Student representatives distributed the survey to their classmates. The results were scanned, statistically analyzed and this report was prepared by the Director and Assistant Director of the CLRC.

Summary of Results

Student Profiles

- Twenty-five to fifty percent of the students in each School responded to this survey. One-half of the responses were obtained from Nursing students and one-third from Medical students.
- Most of the responding students rate their computer skills as Good or Very Good. Most of them have experience with both Macintosh and IBM computers.
- Forty percent of the respondents own an IBM compatible computer. Another 40 percent do not own a computer. Only half of the students who do not own a computer have access to one off-campus.
- Of those who do not own a computer, three-fourths are not planning to purchase one while they are in school primarily because they do not have enough money.
- About half of the respondents use a computer at least once a week.
- Thirty percent of Medical students and Graduate students and 40% of Physical Therapy students use the CLRC at least once a week. They use it primarily for e-mail, printing and access to applications like word processing.
- Only 20% of the Medical students use the World Wide Web once a week and they use it for educational information and for entertainment.

Student Opinions:

- About one-third want to have tutorials on the use of e-mail and access to the Internet and literature databases.

- Fewer than 20% of all respondents access MCO's computers remotely. Of those who do, 60% have had problems and feel that the access speed is inadequate.
- The vast majority of all respondents want to be able to purchase application software in the Bookstore, want access to computers and printers in the copy room across from HE 110, and want to be able to purchase course packets on disks.
- Most students feel that there are *not* sufficient computers for e-mail and word processing in the CLRC.
- The vast majority (3 to 1) of students state that there are *not* enough computers for educational software in the CLRC.
- The students feel that there is adequate working space around the computers in the CLRC and that there are adequate printers for their needs.
- The students were in favor of the CLRC opening earlier on weekdays and strongly in favor of the CLRC staying open later on weekdays.
- The students were in favor of the CLRC opening earlier on week ends and strongly in favor of the CLRC staying open later on week ends. However, the CLRC hours are the same as the Library on weekends.
- The students felt that both the Macintosh and IBM computers available in the CLRC were powerful enough for their needs.
- The vast majority of Medical students were supportive of using General fees to support educational resources like the CLRC.
- The students feel that their questions are adequately answered by the CLRC staff.
- The students feel that the CLRC staff is adequate in numbers.
- The students feel that the CLRC staff is courteous.

Support for the CLRC from Student Fees

There has been a continual decline in support for operating the CLRC since the original Academic Challenge Grant expired several years ago. Ongoing support is needed for:

- paper and toner to operate the printers,
- hardware maintenance and upgrades,
- software maintenance and upgrades,
- acquisition of new educational software,
- miscellaneous operating expenses (e.g., phone, copy machines, office supplies, etc.)

In this era of rapid growth in the capabilities of hardware and software, it is critical that there are ongoing funds available to keep up with the latest developments. When this is neglected for even a year, the CLRC services suffer dramatically. In the past, a crisis had to develop, such as a major equipment breakdown, in order to upgrade the equipment. This is frustrating to students and very stressful for staff. If the hardware and software are not maintained and upgraded on a continuing basis, the staff spends excessive time trying

to repair hardware which is breaking down regularly, and helping patrons to work around the problems created by using older versions of software. This prevents the staff from spending their time in more appropriate activities such as training patrons, supporting educational needs, creating a better working environment.

For several years now, Drs. Levin and Jablonski have attempted to obtain adequate, regular operating support for the CLRC through student fees. This would provide an appropriate mechanism for supporting this type of facility without any substantial increase in fees for most of our students. In fact, the student body has indicated that they would support this type of fee change. This year in particular, Dr. Levin had several meetings with the Academic administration about this change and although there was initial support for the idea, it was not adopted.

CLRC Staff

During the 1995–96 operating year, the CLRC employed 4 full-time and 3 part time staff members: A director, Dr. Jerome A. Levin, an Assistant Director, Dr. Jeffrey J. Jablonski, and two Computer Laboratory Technicians, Anne Trinchero, and Ruth Jacobs. The part time staff consisted of 3 computer assistants: Mamoud Mohamed, Ali Mohamed, and James Patrick.

Staff Promotions

During March of 1996, Anne Trinchero was reclassified from Clerk II to Computer Laboratory Technician.

Staff Activities

The primary means of trying to keep their skills and knowledge current for all full-time CLRC staff involves reading and examining dozens of articles in trade journals, magazines, and discussions groups on the Internet about desktop computer hardware and software, especially that for educational purposes. This information not only allows the staff to make more intelligent decisions about hardware and software purchases, but also helps them address the concerns of CLRC patrons and also to anticipate and prevent problems such as virus infections.

Two CLRC staff took the opportunity to maintain or increase their skills in formal ways. **Ruth Jacobs** took tests for *Netware 4.1 Administration, Netware 4.1 Installation and Configuration, and Revised Netware Service and Support*, to maintain her Netware certifications by Novell as a Certified Netware Instructor and a Certified Netware Engineer. Also, she enrolled in a distance learning program at Kennedy-Western University and is working towards completing her bachelor's degree in Electronics Engineering. Then she will begin working towards a Master's in Computer Science.

Anne Trinchero, to better help the CLRC's patrons with developing desktop presentations, took a 4-week (1 day/week for 4 hours) Microsoft PowerPoint class at Davis College in Toledo.

Challenges/Plans for the Coming Year

Several events that will be transpiring over the coming year that will affect the operation of the CLRC. First, Dr. Jerome A. Levin, Director of the CLRC, will be retiring as of September 1, 1996. Secondly, Media/Classroom Support Services has been repositioned under the VPAA and is being integrated with the CLRC. This is being done to provide the campus with a more coordinated approach to educational technology services.

Dr. Jablonski's current position will be redefined as Assistant Director for Educational Technology Services and he will assume management responsibility for both the CLRC and Media/Classroom Support Services (M/CSS).

The most immediate challenges facing M/CSS include:

- ¥ Developing a computerized equipment reservation/repair system and getting this system into operation by the end of August before the fall session begins.

- ¥ Installing/supporting audiovisual teaching equipment in the new Allied Health building.

- ¥ Completing the classroom technology renovations in HE 100 and 110 including the installation of permanent computers and projections equipment.

- ¥ Starting the classroom technology renovations for rooms HE 103 and 105.

A survey soliciting faculty comments, concerns, and suggestions with regards to M/CSS is planned for early in the fall. This survey will help to pinpoint any problems/deficiencies in current services and to help develop ways to be more responsive to faculty needs. Also, a plan will be developed to help the M/CSS staff upgrade their computer skills. This will better equip them to assist faculty in their use of the new computerized projection equipment in the classroom.

The most difficult challenges facing the CLRC include:

- ¥ Dealing with the increased work load: When Dr. Levin's retires there will be a 25% reduction in full-time staff.

- ¥ Maintaining quality of service: Although the CLRC staff has made great strides toward creating a more "user friendly" atmosphere (a evidenced by responses to the MCO Student Computer Survey—see above), further attempts to ensure patron satisfaction with the CLRC's services will surely be offset by increasing patron dissatisfaction and frustration with its increasingly unreliable and obsolete equipment.

The CLRC operating budget ($15,000) for the 1996–97 operating year is estimated to be insufficient to cover even the cost of paper and toner for the entire year. There is no money for the purchase of new application or educational software, or for the repair of existing equipment. The Library did receive $50,000 for capital equipment purchases which will be shared with the CLRC. It is not anticipated, however, that the number of computers which can be purchased will significantly offset the loss of existing equipment due obsolescence or general mechanical/electronic failures.

During the coming year, Dr. Jablonski will work toward better integrating the functions of the CLRC and M/CSS. He will also examine ways to cross-train the staffs of both areas so that they can assist one another as the need arises.

Appendices

APPENDIX A

COMBINED ACQUISITIONS EXPENDITURES

FISCAL YEAR	PRINT MONOGRAPHS	PRINT JOURNAL SUBSCRIPTIONS	ELECTRONIC RESOURCES
1984-85	$52,272	$312,156	
1985-86	$94,969	$336,943	
1986-87	$84,512	$384,813	
1987-88	$54,817	$407,960	
1988-89	$16,441	$371,575	
1989-90	$41,359	$408,060	
1990-91	$19,551	$458,839	
1991-92	$48,000	$454,381	
1992-93	$26,721	$426,252	
1993-94	$51,500	$452,000	$1,500
1994-95	$33,099	$454,937	$4,553
1995-96	$37,037	$464,921	$5,264

APPENDIX B

GLIDDEN L. BROOKS AWARD

The Glidden L. Brooks Award is presented annually to the student who is distinguished by superiority in all phases of the curriculum as selected by the Promotions Committee.

The medal is named in honor of the first president of the Medical College of Ohio. Each one is constructed of gold and numbered. The medal was designed by Alan Melis of the Toledo Museum of Art.

Date	Name	No.
1972	Archival original and mock-up	1
1972	Glidden L. Brooks, M.D., President	2
1972	Paul Garrett, M.D. (first student recipient)	3
1973	Michael McIntosh, M.D.	4
1974	Michael B. Shannon, M.D.	5
1975	Craig T. Hopple, M.D.	6
1976	David Warrick, M.D.	7
1977	Jerrold Lemoine Smith, M.D.	8
1978	Thomas O. Milbrodt, M.D.	9
1979	Andrew Herschel Glassman, M.D.	10
1980	Mark Lowrence Lloyd, M.D.	11
1981	Richard Thomas Schlinkert, M.D.	12
1982	Jeffrey Stuart Ross, M.D.	13
1984	John Patrick Pigott, M.D.	15
1985	(stolen from Alan Melis)	16
1986	Christopher Lee Blanton, M.D.	17
1987	Frederick Arnold Bunge, M.D.	18A
	Matthew Phillip Bunyard, M.D.	18B
1988	David Eugene Custodio, M.D.	19A
	Thomas Gerard McAlear, M.D.	19B
1989	Janette Collins, M.D.	20
1990	Kelly Schibler, M.D.	21
1991	Brian Scott Miller, M.D.	22A
	Todd Andres Scott, M.D.	22B
1992	Kymberly Anne Gyure, M.D.	23
1993	William E. Hopkins, M.D.	24
1994	Kevin R. Murray, M.D.	25
1995	Francis Mah, M.D.	26
1996	Jeremy Benedetti, M.D.	27A
	Susan Passalaqua, M.D.	27B