Library West Info Commons

Report from the Concept Team

February 24, 2005

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Introduction

The mission of the George A. Smathers Libraries is to meet the information needs of the University of Florida community by serving as a catalyst for research and discovery. The burgeoning use of technology as teaching and learning tools has had a profound impact on the information seeking and research behavior of library users. As these needs change, library facilities must also evolve from collection-centered to learning-centered institutions. A vital component of that process is the development of an Info Commons area designed to foster collaborative learning in a creative environment while matching patron needs with the latest resources and technologies.

The Info Commons will be the focal point of the library's third floor. This area will allow the Libraries to deliver new services by functionally integrating technology and reference service in an increasingly digital environment. A Concept Team was formed to assess the technology needs of the current library users and make recommendations for the creation of the new Info Commons area. Based on information gathered from faculty, students, and some staff, the Library West Concept Team identified the issues and major technologies needed to further bridge teaching and learning with research and discovery within a library facility. An exploration of these academic user needs indicates how users perceive the Library and its ability to synergize the stated needs for productivity technologies with the information skills of Library Reference staff. Generally, this new service delivery model is required to support the needs of our academic community in the continuum of research and discovery towards presentation of knowledge.

Methodology

Information gathering began with site visits to various libraries at other institutions. In August 2004, Smathers Director of Libraries Dale Canelas, Public Services Associate Director Carol Turner, and H&SSS Department members Colleen Seale, LeiLani Freund, and Marilyn Ochoa visited Georgia Tech's Library West Commons, Emory University Main Library and the Computing Center at Cox Hall, and the University of Georgia Student Learning Center. LeiLani later visited the Ohio State University Libraries. Each of these visits supplied us with various Info Commons models (Appendices A & B). These institutions covered various types of needs, from the science/engineering based library to a more general liberal arts library.

The information gathered from the site visits helped in the development of a survey that was conducted to get preliminary results about student information needs at the UF campus (Appendix C). The survey was distributed in the two areas that are currently functioning as Info Commons, Smathers Library Room 100 and the Government Documents area of the Marston Science Library. The results of this survey aided in the formation of questions that were later used for a series of focus groups (Appendix D).

We conducted four focus groups: faculty, graduate, undergraduate and library school students on staff. The Public Services Council and some of the Collection Management subject selectors helped us find faculty that have expressed interest in the technology aspect of the library. A post sent to the graduate student union listserv resulted in a number of graduate student volunteers. We recruited most of the undergraduate participants randomly on the day of the focus session, with the exception of two volunteer students from Marilyn Ochoa's IDH 3931 *Research in the Virtual Library* class. A pizza lunch was provided for the participants as well as a gift card to Starbucks. Non-concept team members facilitated the focus groups in order to reduce biased/slanted questions or suggestions. Two team members took notes during each focus group and a tape recording was taken and transcribed. Trudi DiTrolio, UF Libraries Staff Development Office, also invited LeiLani Freund to a gathering of library staff currently in library school. This informal focus group afforded us an interesting opportunity to find out how the new generation of librarians views the future of libraries.

We also drew information from three outside sources. One included a survey conducted by the Office of Academic Technology (OAT) for the new Hub project that will include a multimedia editing lab (Appendix E). We have communicated with Mark McCallister, the assistant director of the OAT in hopes to collaborate our efforts. Mark has been very responsive to this idea and wants to continue exchanging information about

both projects (Appendix F). LeiLani Freund also talked to Marc Hoit, the UF Interim Associate Provost for IT. Dr. Hoit also expressed his desire to work with the Libraries and specifically mentioned that they could help us with some new video conferencing technology they are employing at OAT that allows connection between multiple locations and many types of equipment.

The second source that gave wonderful feedback was a design workshop hosted by the School of Art and Art History that focused on "using technology in the library." Guest design consultant Duane Bray of IDEO Design Firm conducted the session (www.ideo.com). The concept team was invited to attend and participate by Brian Slawson, one of the faculty members that participated in the faculty focus group and a professor at the School of Art and Art History. The students were asked to design an ideal library space. As part of the workshop students spent an hour visiting one or two campus libraries to observe and ask some basic functionality questions of the staff. A summary of this brainstorming session can be found in Appendix G.

Finally, we were fortunate enough to speak with the Director of Technology for Google, Craig Silverstein, about what he thought libraries should be doing to keep up with technology and what types of services we should focus on for the next ten years. Craig didn't have many answers for us but questioned us closely on what we typically do at the reference desk and how our patrons make use of our services. He advised us to focus on our strengths; those being our unique materials and ourselves as service providers and the experts in locating information. Craig thought that high tech computer equipment is probably not as important as the librarians as resources.

Results

Focus Group Participants

The three structured focus groups had participants from a variety of campus disciplines. The 10 members of the undergraduate group represented Accounting, Anthropology, Botany, Business Management, Civil Engineering, Hardware/Software Engineering, Math, Political Science and Psychology. The 5 members of the graduate student group were from English, History, Linguistics and Psychology. The 7 members of the faculty group represented Art and Architecture, Asian Studies, Business, Education, English, History and Math.

General

A common theme stressed by all groups was a need for continuity, service, and support. The faculty were particularly interested in knowing the libraries' mission and purpose to determine what level of technology it should supply. They believe it is important to have technology that supports the different media in the libraries' collections (i.e. laser discs, but no player). Whatever the final outcome is, the users want the results to be clearly communicated as to what is available to them.

Printing in the libraries was universally disparaged. The cost was mentioned as prohibitive, but the method itself was the most maligned. The CIRCA model is preferred where they can charge to their accounts.

More than once the issue of access for the disable/impaired was mentioned. Above all, flexibility to upgrade was stressed.

PC Workstations

Uniformity to the PC workstations was a consistent request. All stations should have access to the following:

- Internet
- Email
- MS Office

- Ability to access/download to their server
- WebCT

And also, the following components:

- CD/DVD burners
- USB ports in the front
- Easy to access headphone ports

Students stressed that they have little intention of spending long periods at the library workstations. They simply wish to have the option to perform a variety of tasks while on campus.

If the libraries choose to install specialized technology, it is requested that they be placed apart from the general commons area and clearly identified. Technical support staff would be a necessity for these areas. Call buttons would also be useful to request reference or technical assistance.

Laptops

Laptop support was emphasized, particularly by the graduate students. Most graduate students own a laptop, but prefer to bring them into the library where it is more conducive to work. They want a wireless building, but also network ports for those without wireless. Having "electrical outlets everywhere" was a repeated request, not only in the building but also on the grounds outside. Checking out laptops was also mentioned more than once and would be particularly useful to groups.

The security of laptops is of great concern. It was suggested that all tables have laptop-locking devices so a user could leave to go into the stacks, to the information desk and to the restroom. The library could also consider checking out locking cables.

Environmental and Design

In the discussion of the design and environment of the Info Commons area (and consequentially, the whole library), space was the paramount theme. The users want space around individual workstations to spread out books and notes and special stations with enough space for a group to gather around one computer. Push-in keyboards like in L107 would help provide more space at workstations. The group areas would ideally have swivel monitors and wireless mice and keyboards. Students emphasized the library should accommodate both group study areas and quiet study. The two areas should be separated. Lighting is also a concern. No one liked fluorescent lighting. Track lighting was mentioned as an alternative.

It was stressed that the library should be comfortable and inviting, not institutional. Comfortable chairs, couches, artwork and a pleasant décor would go far to help achieve this.

Other Technologies

Scanners are of particularly high interest and not just individual scanners. The users want microform scanners, slide scanners and 50-page feed scanners. There was also a request for audio stations like those in Turlington. They would need to be in a quiet space; this is a problem with the Turlington setup.

Foreign language support was also requested. Language keyboards in particular. The library could have different language keyboards available for checkout and the appropriate software loaded at the workstations.

Interestingly, support for PDA's was not a priority. Those who have them rarely use them. However faculty suggested having PDA's to checkout for use in the stacks and that librarians carry one around as they help individuals. One unique suggestion was to have subject specific portals that are tied to each person's logon.

Miscellaneous

Invariably, other issues regarding the library and its services came to light and should be mentioned. They concerned the following:

- 24-hour access to at least one floor with study space and computers.
- Change the PC authentication from the Gator 1 card model. This method is considered cumbersome and insecure.
- Coffee, Coffee, and did we mention? Coffee.
- Cell phone blockers in quiet study areas.

Conclusion and Recommendations

Five major themes emerged from the focus groups and consultations described in this document and its appendices. The Library West Info Commons Concept Team strongly urges that these issues be addressed first and foremost because they so profoundly affect our users' perceptions of the quality of our services. These critical areas are:

1. Printing services
   There was not one group or individual who did not criticize our current printing service. Students want to be able to charge printing to student accounts as they do in the labs. The complexity of the printing process bothers everyone. A related issue is the ability to save and download work. We need to make server access available so that students can easily save their work to their designated server space and have an alternative to printing everything out on library computers.

2. Consistency and uniformity of our computer services.
   Users dislike having to search for a computer with email access or Microsoft Office or a CD burner. They would like all the computers in our library system to have the same basic services available and an easy and uniform A-Z menu of those services on the start screen. Respondents felt this would not only be easier for the walk-in patron, but also for the library staff.

3. Space and comfort
   The students especially want space around the computers to spread out and to sit together in small groups. They do not want rows of crowded computers in a lab-like environment. It appears that this has already been well addressed in the Library West plans, but we would like to urge the design team to keep this concept continually in mind as spaces are developed. Comfort is also a top priority for all users. Several mentioned nice furniture and the "Starbucks-like" or coffeehouse atmosphere that is the opposite of the sterile institutional look so widespread on older campuses.

4. Ports and plug-ins
   The plethora of key fob storage devices, flash memory cards, and other peripherals, not to mention audio headphones, makes visibility and accessibility of the peripheral connections a must. FireWire ports are also increasingly necessary. The Caltech Library System has recently installed a media "dashboard" on the front of their workstations to facilitate easy access. The design team should look at this and other creative ways of making ports accessible.

5. Installation of personal software
   There are many applications on the Web that require special software to be installed. One such example is the necessity to download fonts or special keyboard software for reading foreign language text. Current security on our library public workstations prevents installations without a library Systems Liaison's intervention.

Once the priority issues are resolved, the Libraries can turn to the design of the Third Floor Info Commons and the new technologies that will make it an exciting and dynamic area. One of the hardest tasks we have is to try to anticipate the technologies of the future and what our users will not only need, but also desire.

Who knows what students will be using five years from now, or even six months from now in our fast-paced, changing world of information? We must effectively design our space to maximize flexibility. It seems likely that we will reduce our reliance on general purpose fixed workstations and gradually move to more portable solutions. However, we will still likely maintain specialized workstations on at least part of the third floor. Well-designed, movable furniture can be adapted to this sort of change.

We seem to be in a transition period at this time. Users are still relying to some extent on print materials, but desiring of more and more digital access. Faculty exhorted us to make sure we can provide the best possible access to our unique paper and microfilm materials. The Libraries need to think about the likely increase in requests for digitization and publishing on demand. Teaching faculty regularly consult with the Digital Library Center for their digitization needs. Where do we fit into this picture? Will the Digital Library provide this service or will we eventually provide such a service in Library West? Clearly, our space and hardware needs on the third floor would change were we to take on digitization and publishing services, or provide a self-service area for such activities.

There is a divide between UF students who seem to have every electronic gadget and piece of software they need and those who still have no personal computer in their place of residence. Two of the students we contacted still totally rely on libraries and labs for their computing needs. All students expressed the need for access to a campus computer once in awhile, usually for a short period of time during which they send an email, finish up a paper and print it out, or access a professor's Web site. Some have home computers but not high-speed network connections for activities such as viewing video streamed classes. Although laptops are increasingly popular, PDA's do not seem to have widespread use and we are not yet at a point where the student carries along everything he or she needs for on-line access. Dr. Marc Hoit, the Interim UF Associate Provost for IT, said that their research conclusions were similar, indicating that UF students may still be somewhat behind the curve in terms of ownership of personal computing equipment and regardless, may still need a librarian's or teacher's help to find information and often need quick access to a public computer between classes.

The research process is a continuum that starts with discovery and research. This is where librarians have traditionally played our biggest role. Today's technology enables students to begin processing the information immediately, leading many libraries to develop the info commons environment where the user has access to productivity software. This processing activity is increasingly collaborative in a teaching environment that stresses group assignments and interaction. Finally, the individual or group packages and prepares the information for presentation. Packaging and presentation is a relatively new role for the library, but it is an integral part of today's learning environment and a new opportunity for the UF Libraries to expand our role in the learning process.

We face another challenge and that is space in our new library. The Concept Team was brought in late in the planning process. The infrastructure and basic design of the space is already fixed. The library building itself is not huge. However, the team strongly feels that the number of computers on the third floor is not as important as providing plenty of room for students to spread out and furnishings and space that work well for collaboration. With these limitations in mind, we recommend the following:

Make the third floor of Library West a dynamic area that focuses on collaboration in a comfortable research and learning environment

- Furniture that can be moved around to make groupings when desired
- Movable walls or dividers that give the users a sense of space and privacy
- Writing surfaces everywhere (walls you can write on, Smart Boards, etc.)
- Lots of electrical outlets, hard wired Ethernet connections, as well as wireless access for laptops and printing from laptops
- An open area for screening presentations on the fly, as they are being developed

Keep the "Info Commons" designation for the whole third floor area. Information is what we are all about (but "Info" is shorter and sounds more techie.) Some libraries are moving toward "learning center" but we

thought this to be a little broad and it doesn't adequately set us apart as an information center. "Commons" conveys the commonality of purpose and access for all.

Establish a "Technology Corner" that is well separated from the rest of the computer area. Students requested that such an area be clearly defined.

- Specialized, new technologies:
    - High-end media workstations, including Apple workstations
    - Music editing
    - Film editing
    - Cameras
    - 3D design and visualization software
    - Animation software
- Invite vendors to showcase new technology
- Invite groups working on special projects to present their work
- Have open houses and demos
- Large video displays
    - When not in use show close-captioned CNN, or run public announcements on them.

If the Technology Corner is not feasible, we recommend at least two of the group study rooms be equipped with this technology instead. These rooms could be reserved by groups needing this specialized technology, but also available to regular study groups.

Improve access and adaptive technology for users with disabilities

- The design team should contact Richard Nelson in the Disability Resources Program (Dean of Students Office) to discuss needs.
- All workstations should have, at a minimum, technology for the visually impaired.

Keep a number of general use computers to support students processing the information they obtain at the Libraries.

- Insofar as possible, make the services offered on the computers all the same; do this across the whole library system.
- Provide an easy to read, A-Z menu of programs on the computers
- Productivity software such as Microsoft Office
- Email and listserv capability
- Language support – ability to download keyboard software; CJK, etc.
- Web publishing software
- Basic multimedia software (Media Player; Quicktime, etc.)
- CD/DVD burners on all workstations
- Access to server space for downloading
- Ability to download personal software
- Digitizing - lots of scanners everywhere; OCR software.

Additional laptops and/or tablet PC's with installed network and wireless cards to check out for in-house use only; include cables for checkout.

- Provide laptop security cable kits for checkout
- All tables in the library should have the ability to secure a laptop to it

Microform area – this is a priority area for faculty who feel that access to these unique materials is poor.

- Digital film viewers and scanners

Group study rooms

- Equipped with a PC workstation containing the same elements as workstations in the general computing area
- Sound-proofed

- Available for rehearsing presentations, screening movies, etc.
- Installed projectors and screens (or smart boards) and a PC
- Convertible to video conferencing

PR/Outreach

- Provide a large mall-like layout map of the various service areas
- Invite groups working on special projects to present their work
- Have open houses and demos
- Have a “gaming night” once or twice per semester
- Run public service announcements on large screen displays and maybe every workstation monitor.

Service and Staffing

- Provide call buttons or Messenger at every workstation and in every study room so that users can contact a librarian or technical assistant for help.
- Have student technical assistants available all hours the third floor is open and consider roving reference librarians as well.
- Try a pilot exchange program with OAT – provide a reference librarian who would spend several hours per week in the new HUB computer center in exchange for an OAT technician who would spend time at our facilities assisting users and collaborating with H&SSS technical staff.
- Hire a full-time coordinator in the Systems Department whose duties would focus on support for the public computer workstations and infrastructure of the third floor Library West area.
- Hire a full-time H&SSS IT Librarian who would train student workers and regular staff and be a liaison to both OAT and the Libraries’ Systems Department. This would probably be the librarian who would also do the exchange with the HUB.

Refreshment area with laptop connections and comfortable seating

- We probably don’t even need to say it. It was on everyone’s priority list. Somebody, please call Starbuck’s!

These recommendations are for an Info Commons that successfully takes into account stated user needs. Basic yet critical issues of consistency, space, flexibility and ease of use of equipment help create the overall look and feel of the third floor space of Library West. However, since this is a rapidly changing technological environment, the Team recommends that the Library focuses on evolving into a learning-centered institution. The Library can become this learning-centered institution by offering collaborative learning and presentation spaces equipped with appropriate resources and technologies necessary in the continuum of the research process. Specific resources and technologies that should be available to fit user needs will be determined by the Library’s continuing communication with faculty, student and staff, and other departments on campus, such as the Office of Academic Technology. Further, new teaching and learning initiatives and periodic assessment of current technologies will enable the Library to strengthen its service delivery model which unites the need for technology with the need for research assistance.

Appendices

APPENDIX A : Notes from Georgia Libraries visits……..……page 10

APPENDIX B : Notes from Ohio Library visits……page 13

APPENDIX C : Info Commons survey results…….page 14

APPENDIX D : Focus Group Highlights……page 17

APPENDIX E : OAT survey results…….page 23

APPENDIX F : Notes from meetings with Mark McCallister (AOT)……..page 28

APPENDIX G : Design students' workshop feedback…….page 30

APPENDIX A

Visits to Georgia universities' Info Commons

Dale Canelas, Carol Turner, Colleen Seale, LeiLani Freund and Marilyn Ochoa took a 3-day trip to several universities in Georgia to tour the Info Commons facilities each has developed. The University of Georgia, Emory University and Georgia Institute of Technology each have unique representations of facilities joining information technologies together with reference services. While no single facility would be appropriate in the University of Florida (UF) Info Commons space to be developed, each provided resources or services that can be considered for UF.

University of Georgia
The University of Georgia (UGA) constructed the Student Learning Center (SLC) as a partnership between the University Libraries, Office of Instructional Support and Development and Enterprise Information Technology Services (EITS). It is the third "library" building in the center of campus; the Main and Science Libraries are on opposite sides of campus. However, although its librarians describe this facility as a Library Info Commons, it is generally a multi-functional classroom building with library reference help and training.

The SLC facility has 26 classrooms, 4 advanced learning computer labs and 2,000 dataports and wireless network connectivity that extend outside of the building. Along with these features, the SLC also has a coffee shop and many collaborative study rooms with at least one glass wall; these are regularly in use. Overall signage is lacking, but this may be due to the newness of the building.

This facility offers 500 workstations with 23 scanners available throughout the building and serviced by staff service desks. Four reference/information desks are available, however, only the third floor of the SLC has both reference staff and the EITS staff. The three other desks are administratively separate from the Libraries. As it turned out, other computer labs on campus once administered by EITS shut down to concentrate efforts at SLC. The Libraries' involvement with the technologies is limited as EITS staff maintains the computers throughout the large facility. However, six full time reference librarians do provide research assistance using electronic resources and a small set of non-circulating reference materials; the librarians indicated that they rove around the computer areas in hopes of assisting patrons uncertain or unaware that help is available.

Apart from the EITS/Library supported computer areas in the SLC, the Office of Instructional Support and Development provides the classroom support and maintains the equipment in the classrooms. The Library's involvement is primarily with regard to scheduling the classrooms specifically designed for library training. The other classrooms are administered separately.

Needless to say, with the development of the SLC, UGA reference librarian roles must evolve, though no specific discussion between UF and UGA librarians dealt with library philosophy. The development of new skills, including the ability to use and troubleshoot technology/computers and to work collaboratively with other academic units, was mentioned as effects of the collaboration. According to some of UGA focus group meetings and statistics, the UGA librarians report that traditional use of printed resources has declined along with a decrease in demand for reference work. However, since classes meet in the same building as where the computers are, and because of the collaborative study rooms available on a first-come, first-serve basis, use of the SLC is steadily increasing.

Emory University
Emory University's Center for Library and Information Resources is a traditional library with 150 computers interspersed between stacks of books and study areas within the library. Levels 1 to 3 are dubbed the InfoCommons which is a service point and research environment. The library provides a laptop loan program for in-house use only.

The distributed InfoCommons arrangement leaves a user with no identifiable “Info Commons” area. However, a separate facility called the Computer Center at Cox Hall provided leading-edge technology, in a self-contained facility across the street from the Library. The Center includes kiosks and an informal meeting place at the front of the facility. The rest of the facility was designed to provide collaborative work areas for students and faculty. Multimedia pods are equipped with Macintosh computers and have flexible seating; cinema displays; DVD and VHS decks; and multimedia software. Areas marked as Team Stations provides PCs with desktop publishing, scanners and statistical software. Most PCs computers have dual monitors attached.

Smart and white boards were interspersed throughout the Cox Center: a plasma display station provides plug-and-play capability with touch screen control and expanded image viewing; a presentation area enables students to use either whiteboards or laptops with portable projectors; and a collaboration corner features an interactive whiteboard. One conference room, a wireless-ready classroom and a gallery showcasing student work is also embedded in the Center. One of the most unique qualities of the Cox Center is the use of flexible furniture; most of the chairs are on wheels or have attached desks/platforms for work. Podular furniture in the designing area of the Center use both stool and large pillows as chairs.

In addition to computers within the Libraries and at the Cox Center, Emory provides faculty, students and administrators assistance with Blackboard, video editing, scanning, video conferencing, and multimedia and web development training at Emory’s Center for Interactive Teaching. This facility is much like the Center for Institutional Teaching and Training at the University of Florida. Further, the Emory College Language Center Collaborative Classroom complements other learning classrooms on campus; the Classroom provides couch-style seating for eighteen students to view media on the presentation system or on the available laptops. The computers in this area have the same profile as the public computers throughout the InfoCommons except for the course specific software needed for language teaching.

Georgia Institute of Technology

The Georgia Institute of Technology (Georgia Tech) was the last university that the group visited. As at UGA, Georgia Tech shut down a number of computer labs on campus; from twelve, three remain, including the lab in the library. The Info Commons, as a partnership with the Office of Information Technology is staffed by three full time Information Associates who have both the information technology skills as well as information seeking and service skills. A tour of the facility showed three major areas for productivity.

The first productivity area is the general computing area, where roughly 128 computers are on the floor and available on a first-come, first-serve basis. The area is comprised of computers with either Macintosh or PC operating systems. Heavily used, within the hour that the team met with the director for the computing area, traffic increased significantly, creating a queue for computer use. This computing area has productivity software including word processor applications and text editors (such as Microsoft Word and Emacs) and bibliographic utilities such as Endnote, along with web designing tools, engineering, programming, mathematics, chemistry and statistical programs. Internet access, messaging, SSH terminals and FTP are also available on these machines. In addition to these programs, Mac OS standard multimedia applications are available on the Macintosh computers. Each workstation in this area is allotted four feet of workspace and have headphones attached to it.

In addition to the computers on the floor, wireless card checkout for personal laptops is available; power and network outlets are available throughout the area for patrons to use with their own equipment. Further, an area is designated for tutoring at the Libraries; this is another collaborative effort with academic departments. This area is next to the circulation desk and could be extended in the future to include more tables or workstations; at this stage, tutoring space includes three small tables fitting 2 people on each side.

The second area is named the Library West Commons Lab, comprised of 22 computers. “Just in case” staff support scanning, color printing, digital photo, video and sound editing services. In addition, VHS video recording, editing and conversion to digital files; slide scanning, audio and video tape dubbing; graphics arts creation; DVD and CD burning; presentation building and website development and more are available.

Dual monitors are available at each PC or Macintosh workstation, and a projector and screen are available at one end of the small nook partitioned for this Lab. Among the unique services offered is the camcorder checkout; since Georgia Tech is a part of the Georgia iMovie competition, a need to provide this equipment and these software applications is necessary. Each station is allotted about 8 feet of workspace.

The third productivity work area is a presentation room which serves as a conference/videoconferencing/presentation practice room available for students and faculty to reserve. According to our hosts, this room is most heavily used as a presentation practice room, where students bring in their slideshows or videos for viewing and practice.

APPENDIX B

Notes from Ohio State Libraries visit
November 1, 2004

Science & Technology Library tour:

Digital Union is a collaboration of the OSU Libraries, the Chief Information Officer for Ohio State University, the campus ADA Coordinator, and participating corporate partners.

Corporations showcase their newest equipment in this area and gather usage information.

- There was a huge video display in the front corporate area – must have been at least 3' x 4'.
- Laptops that had a metal shield that could be pulled up over the laptop keyboard and regular keyboard used instead – very flexible for users.
- Laptops that could be folded over and converted to tablet PC's.

They are "brutal" about maintaining the food and drink policy in here.

Lots of Herman Miller furniture, including the chairs with arms we saw at Emory. There was one very simple, streamlined conference table chair that looked like some kind of blue wire mesh that was extremely comfortable.

A variety of digital cameras, camcorders, and other small equipment is available for checkout.

A campus IT person, Eddie Ewbers, was reassigned to the Libraries to oversee this area.

The Science Library will soon also house, on one of the upper floors, a 30-seat IT lab that is entirely managed by the campus computer group.

Main floor – about 40-50 general use computes. All have Microsoft Office and email. Reference librarians were at first concerned about this, but have since seen that it is not a problem.

The Head of the Science & Tech Library said that at any given time, 25-30% of the workstations are down for needed maintenance. This is because the Library Systems office is simply spread too thin and is one the reasons they are moving toward more campus IT involvement.

There was a small, but very attractive faculty reading room on the 2nd floor that they think will be well used when the main library staff is displaced by the renovation.

All furniture in the Science Library was of a very nice cherry wood, much like U. of Georgia.

APPENDIX C

Help Us Plan the Computer & Media Areas of the New Library West

Tell us who you are:

Undergrad	26 + 14 = 40
Grad student	7 + 0 = 7
UF Staff	2 + 2 = 4
Faculty	3 + 0 = 3
Other	3 + 0 = 3

College level completed:

Some college	27 + 11 = 38
Bachelors	2 + 2 = 4
Masters	9 + 0 = 9
Doctorate	1 + 0 = 1

What do you do at Library computers? Please check all that apply.

Email	37 + 14 = 51
Search Library databases	28 + 10 = 38
Surf the web	30 + 10 = 40
Use WebCT	10 + 8 = 18
Watch video classes	6 + 4 = 10
Burn CD	0 + 3 = 3
Scan documents or pictures	5 + 2 = 7
Word process	24 + 12 = 36
Use MS Excel	2 + 3 = 5
Use MS PowerPoint	8 + 5 = 13

Do you have any of the following?

PC compatible	12 + 4 = 16
Apple	2 + 0 = 2
PDA	5 + 1 = 6
Home desktop computer	26 + 8 = 34
Laptop	18 + 7 = 25

Do you bring your laptop to campus?

Yes	9 + 6 = 15
No	22 + 6 = 28

Total Number of Respondees 41 + 16 = 57

3. What do you do at Library computers? (Other)

- Print.
- Read my home country's (Tanzania) newspapers online.
- I only surf the web for info on paper to write.
- Print documents from home.
- Update website.
- I use the computer at Marston's, I would like to see these, I checked, in the computer.
- Gaming.
- Check out DVDs and VHS movies.
- Use class software (e.g. Matlab, Maple).
- Use translation sites and write papers.
- Use MS Word.
- Use reference material.
- Print.
- ----------
- Research.
- I use the UF library's subscription s to journal collections.
- Printing.

4. What do you need or want to do that is not available in this computer area? Let your imagination soar – what would make this a great library service for you?

- Transfer to PTF.
- More comfortable chairs for better back support.
- DVD capabilities.
- Longer hours at Smathers Library East.
- Not sure. Although the Word programs don't have some of the normal correction line capitalizations at beginning of sentences.
- Voice over IP, download to PDA, laptop walk-up ports, printing from personal laptop.
- I think the services provided are great. Can't think of anything else.
- It would be useful for more of the computers to have word and a zip drive. Also the printing is quite expensive.
- Opportunity for desktop publishing.
- Stereo headphones at each computer, updated Microsoft Office.
- Math (higher level) programs.
- Import video from camcorders and edit it with Adobe Premiere to create videos to teach foreign languages.
- Can't think of anything…
- All the services are fine.
- MS Word and Powerpoint at every computer. A really nice scanner, a color printer (really, really nice) for color documents. Can be more expensive but as long as it is competitive it would be awesome. A place for memory keys in the front of computer.
- To do all/everything I haven't learned how to do yet, but need to know how to go about some of these procedures.
- Watch DVD.
- Have an after hours drop box for movies – the one now explicitly asks for patrons to only put in books in to the drop box. I constantly have had to disobey the request because there is no other option.
- More desktop space per computer for papers, notebooks, textbooks, etc. Some sense of priority or personal space perhaps involving higher partitions would be great.
- I need to download fonts that I use in my homework (SILIAP – Arborwin), but the system wouldn't let me.
- Wireless connectivity for my laptop.
- Perhaps get a movie projector and a screen set up in a private viewing room where patrons can watch movies.

- Adobe Acrobat to master documents would be helpful. Also, a cheaper solution to printing would be very appreciated!!! A large format scanner, a movie program for Apple, Apple computers. Apple computers are best for graphics and movies; movies are becoming popular and can be applied to distributing information. Final Cut Express would be adequate for that (Final Cut Pro is really for very advanced students but a copy could be available). Having blank CDs available would be a plus and Toast at least on some machines because you can do so much more with a CD than simply bstoring data one time.
- It's all here.
- I would like it to be easier to save temporary files instead of always needing a CD or disc.
- All the computers are different. It would be nice if they all had the same programs.
- More Word compatible computers. More foreign language recourses.
- Create web pages, videoconferencing (perhaps have a small group study room for this), use flash drives or be able to ftp and telnet (SSH) to outside servers. OCR documents and create flash movies as well as movies from pictures and music – (i.e. iDVD or imovie on an Apple).
- ----------
- Check e-mail. I do not like the CRC tabs, but some programs are only on those computers. I would like those programs to be available everywhere on campus.
- Yes I want the school to buy a laptop for me.
- We need to burn music, which is not available.
- I want to watch my music video and listen to my Internet radio without any problems.
- More power outlets to use my own laptop.
- I would like to right click on things.
- Temporarily save documents to the computer.
- Nothing. I mostly use Microsoft Word – maybe an encyclopedia would be helpful.
- DVD Burners, web page creation, PDA downloads. Extensive graphical user interfaces. Everything!!!
- Nothing.
- I would like to have cameras – so one can call their teacher and the teacher can be able to "visually" explain the answer to me. (For math class!)
- Burn CDs and download music.
- I'd like to be able to use email and word on all computers – I always have to wait and wait for computer to print my papers because yours cannot do both as most of ours.

APPENDIX D

Highlights of Focus Group Transcripts

Faculty

Mission

Faculty cautioned us being clear on our mission. Do we really want to be the IT leaders on campus? If so, this would be a radical change in the Libraries' mission to the university that should be clearly articulated not only to those who work in the Libraries, but also to all the constituents we serve.

Would a multimedia tech area just duplicate what already is on campus in individual departments? Will anyone use it? Is having totally up-to-date equipment the real function of the library? Do you really want to have both Macs and PC's and all the software the students need? Can you really do that?

What do the UF Libraries want to be? At the University of Michigan, the library decided it would be the tech center for the university. The University of Chicago went the opposite way. They said they would build the space and then people will use the space in different ways.

It would be nice if the library were the information exchange; the place where all media comes together. But do you have the space for that? The English Department is talking about creating film labs and production labs. It would be nice if the library took that over, but would you really have room for that? The consensus seemed to be that we would not be able to support that long term, either in terms of staff expertise or money for equipment.

If the library is all about collaborative spaces, it could become this flowing knowledge area of groups working together. That fundamentally changes what it is. You would need adaptability everywhere in order to use the space for years to come.

The library fills specialized needs: microfilm; special collections in which the physical qualities of the book or manuscript are important; design as well as content.

What can you and the students do better at home than in the libraries?

Research has really changed. Now there is so much electronic content. If a reference is really important to your research and only in paper, of course you will wait for it and get it. But for the more marginal items, you might start making decisions based on availability. I used to go to the library all the time and now I don't unless I really need something.

Environment

The Norman Hall technology area is impressive because of its notion of space. It's a comfortable environment; a place to go and sit with your cup of coffee and wireless laptop. Most students go to the CIRCA lab for their searching and then they go to the comfortable place to finish up.

More space. Online courses require students to take notes, spread out, and work for long periods of time.

- Small rooms where a group can go and talk and not disturb anyone. Another faculty member disagreed, stating that the technology allows the student to be collaborative wherever they are, so we don't need to provide special group spaces.

Software/Hardware

- Students need a way to gather information and then send it out somewhere. They need server access for saving files.
- The library needs to provide more accessibility for the disabled. Why don't all of your computers have screen readers? This may be a legal issue very soon.
- **The library as it is now is useless for displaying digital media.**
- The library should not have any materials in any medium you do not support. For example, you have laser discs, but no laser disc players.
- You have Chinese materials, but computers don't support Asian characters.
- Microfilm scanners.

Instead of rows and rows of computers, why not just provide lots of laptops connections and maybe even laptops to check out for in-library use?

Think portability. Loan out PDA's that the students could take into the stacks and take notes on them. How about portable scanners that could be hooked to the laptops?

Do you send your students to the library?

Most said they do, specifically to get them to look at paper materials and learn to use the libraries.

One faculty participant said he does not see the library as a "consecrated place." He doesn't care whether his students go there or not. The library should be about access. The information should be in lots of places. We are not to the point where everything is online yet, so there will need to be several years of intermediate access in lots of locations.

One person said he would make use of more library classrooms where he could take his class and introduce them to library materials and their library contact.

<u>UF Libraries Staff - Library School Students</u>

Mission of the library

What is our role and what is more appropriate coming from OAT? Do we have to have every technology the students need? Isn't that the role of OAT?

Will there be staff members who will be able to support high-end computer services and more specialized software? The group thought it was important to provide help.

One person said she really didn't see the need for too many specialized computers. From her own experience as a student, she has only small chunks of time between classes. Students are very decentralized. They might do an email, finish editing a paper, scan in a library reference book page, or print off a paper – they won't sit there for hours at a time to do a project.

They liked the term "Info Commons." It conveys exactly what the libraries are about: information for all on a common level and equality of access.

Hardware/Software

- Students are doing more image-based work. All computers should have the peripherals (scanners) and software that support this.
- More scanners in general and a few slide scanners.
- Laptop use is going to be huge, so have plenty of plugs as well as wireless.
- PDA's will be totally replaced by smart phones.

If we have special computers for film editing or something like it, make sure they are in different areas apart from the rest of the computers, clearly marked and in areas where group interaction will not bother the other patrons.

Environment

- Have call buttons or some mechanism to request a librarian's help. Students don't want to leave their computer open and their possessions sitting unattended, nor do they want to pack it all up and come to the reference desk.
- Make the area more comfortable
  - Chairs that recline a little
  - Track lighting
  - Inviting décor
  - Art on the walls

<u>Graduate Students</u>

5 participants

Do you use the computers in the library?

Yes – 2
Rarely – 1
No – 2
(2 use the library for microform)

Reasons for not using the libraries were the restrictions:

- Not able to download at the library
- No laptop ports (not everyone uses wireless)

Do you have your own computers?

3 have laptops, but 1 does not bring it to campus
2 also use department computing labs

Do you have PDA's?

1 did

What do you do at home that you don't do at the library?

- Printing
  - Cost at libraries is prohibitive
  - Marston's set up is awful
  - CSE's lab is much better
- SAS, SPSS

Even with having everything they need on their laptop, still like to work in the library environment – quieter.

Environment

- No fluorescent lighting
- Open space
  - No partitions
  - No tables between stacks
- Some like closed in spaces (like at FSU Science Library – partitioned but looking out a window)
- Don't like overhead carrels at Marston
- Study rooms (like at UNC/Chapel Hill's new library)
- Laptop locking stations at every table (have cords available for checkout)
- Have study rooms wired
- USB ports (cables – like in the CSE- get damaged less)
- Electrical outlets everywhere

Software/Hardware

- Flat panel monitors
  - Saves on electricity
  - Better on person's vision
  - Saves space
- Student accessible document imaging library
  - Like at Columbia, Yale and U Michigan
  - Rare book scanning – library could have a copy of student's work
  - Would need an attendant/supervisor
- 50 sheet scanners
- Microform scanners
- Audio stations (like in basement of Turlington, only it is too noisy there)
- Lots of RAM
- Visually impaired reading station
- USB readily accessible
- Flexibility to upgrade
- Separate drives to load your own software
- Full adobe
- DVD burners
- Laptop borrowing/checkout
- Savvy technical staff on the floor
- Language keyboards (a variety available for checkout within library)

Other issues

- They want coffee

- Think “team-based”
- Think “customization”
- “Real” quiet study areas
- Cell phone blockers
- Software that will allow you to access programs from other areas of campus
- Wireless in the front/University facing plaza
- Electric outlets outside (like in lamp posts)

Undergraduate Students

10 participants

All used the libraries to some degree, but the frequency varied widely.

Two of the ten students did not have any personal computer at all; they depend heavily on MSL for computing. The rest had laptops and/or home computers. Two had PDA’s that they do not use.

What do you do at home that you don’t/can’t do at the library?

- More likely to write papers or do big projects at home, but edit and print at the library or labs.

Software/Hardware

- Word processing and e-mail on every computer (they asked why should they have to wait in line for e-mail at MSL)
- More wireless accessible areas
- Standardization of the computer start menus – why not a simple A-Z list?
- Ability to open email attachments
- A scanner to scan their id for login
- Profiles/portals - the computer recognizes you when you log on and brings up what you need
- Network access so they can save their work to a server
- Ability to access WebCT and other courses on-line
- Speedy CPU’s
- Decent sized monitors
- Ability to do programming
- CD Burning on all computers
- Easy USB access
- Communication about what is on the computers

One student noted that even the MSL 107 classroom computers do not have uniform menus.

Environment

- Space to spread out
- Track lighting rather than fluorescent
- Comfortable chairs (like in the Library East Conference Room)
- Push in keyboards like MSL 107
- Book stands

- Wireless mice for group study areas
- Furnishings that are attractive and comfortable rather than institutional
- Couches
- Plants
- Swivel monitors (Like CIRCA lab classroom) in group study areas
- Monitors under glass (like at SFCC) so you can write on top of them
- Better study space
- Well designed space rather than walls or high partitions
- Glass or some kind of see-through walls might be an option
- Coffee!

One student said he wanted more of a “Starbuck’s-like atmosphere” (warm, comfortable environment) even if they can’t have the coffee.

APPENDIX E

Hub Questions for Student Interviews

- Introduction

  - *How long have you been at UF*? (Total Responses: 235)

1 yr	2 yrs	3 yrs	4yrs	> 4 yrs
83	47	45	37	20

  - *What is the Hub*? (Total Responses: 309)

Old bookstore	69
Food place	157
Hangout area	10
Bus stop	15
Study area	6
Empty building	19
International student studies	4
Bank	2
Shopping	3
Lounge	1
Center of campus	1
Computer tech	4
Building next to CSE	5
Store	2
Plaza	1
Mid-campus	1
Not sure	7

- *What is your major and/or department where you work*? (Total Responses: 232)

Aerospace engineering	1
Agricultural education & communication	4
Anthropology	2
Architecture	1
Art history	1
Bio-chemistry	1
Biology	1
Bio-med	1
Building construction	3
Business	29
Chemical engineering	5
Chemistry	6
Civil engineering	2
Computer information science & engineering	9
Criminology	4
Decision & information science	1
East Asian studies	1
Economics	5
Electrical engineering	3
Elementary education	5

Engineering	2
English	7
Environmental science	1
Event management	1
Exercise physiology	5
Fine arts	1
Fitness / wellness	3
French	1
Health science	11
History	8
Industrial engineering	1
Interior design	3
Journalism	2
Mass communication	1
Math	1
Mechanical engineering	5
Microbiology	7
Music	5
Natural resource conservation	1
Nuclear engineering	1
Nursing	2
Nutrition	3
Occupational therapy	2
Pharmacy	3
Physical therapy	2
Physics	1
Political science	14
Pre-med	3
Pre-pharmacy	4
Psychology	18
Public relations	2
Quantitative science	1
Sociology	11
Spanish	1
Sports management	3
Telecommunications	2
Theater	1
Therapeutic recreation	1
Travel & tourism	2
Wildlife	1
Women's studies	1
Zoology	2

- Study
  - *Do you study in groups*? (Total Responses: 235)

Never	Sometimes	Often	Always
37	160	33	5

  - *Do you study alone in places where others are studying alone, such as the library*? (Total Responses: 225)

Never	Sometimes	Often	Always
31	100	88	14

- *Do you like to eat while you study*? (Total Responses: 241)

Never	Sometimes	Often	Always
30	119	68	24

- *Do you study topics not required for classes or grades*? (Total Responses: 235)

Never	Sometimes	Often	Always
89	105	32	9

- *What time of day do you study best*? (Total Responses: 242)

1 a.m.-7 a.m.	7 a.m.- 1 p.m.	1 p.m.-7 p.m.	7 p.m.-1 a.m
17	29	74	122

- The Hub & Computer Technology

  - *Do you use the computer labs on campus*? (Total Responses: 243)

Never	Sometimes	Often	Always
64	101	62	16

  - *Do you use Computer Help Desk services*? (Total Responses: 247)

Never	Sometimes	Often	Always
142	87	18	0

  - *Would you spend time learning cutting edge computer applications*? (Total Responses: 236)

Never	Sometimes	Often	Always
73	119	32	12

- The Hub & Globalism

  - *Do you think meeting people from other countries is important to your education*? (Total Responses: 236)

No	Little	Somewhat	Very
12	30	102	92

  - *If you are from another country, would you like to meet more people*? (Total Responses: 234)

No	Little	Somewhat	Very	Not an International Student
10	9	40	64	111

  - *Is it important to help new students from other countries feel welcome at UF*? (Total Responses: 236)

No	Little	Somewhat	Very
2	9	50	175

  - *How do you meet new people on campus*? (Total Responses: 319)

Introduce myself	23
Start talking	36
Dorm	6

Sorority/ fraternity	4
Classes	127
Religious groups	1
Friends	18
Service group	4
Clubs/ organizations	58
Work	8
Bus stop	8
Bowling	1
Bars	3
Sports	6
Reitz Union	1
Computer labs	1
Library	1
Volunteering	2
Conflicts	1
Gym	5
Don't	5

- Visual Features of the Hub

¡*Should art in this building be computer generated, works of Florida artists, or other*?
(Total Responses: 218)

Computer Generated	Florida Artists	Other	
55	128	1	Culturally eclectic
		14	Student work
		1	Any kind of art work
		1	Computer animation
		1	International artists
		1	Local artists
		15	Mixture

  - Is environmental conservation important for this building? (Total Responses: 216)

No	Little	Somewhat	Very
14	15	84	103

- The Hub
  - *From where do you enter the Hub*? (Total Responses: 206)

North Side (Stadium Road)	40
South Side	10
Bus Stop	16
Turlington	1
Food Court	81
Front Door	15
Back Door	7
Across from Library	2
Stair	4
ATM	3
Nearest to Rolfs Hall	1
"Through the Door"	7

Reitz	7
Closest Entrance	5
Don't Go There	7

- *How much time roughly would you consider being able to spend in the Hub if it had these activity areas*? (Total Responses: 222)

O hrs	1- 2 hrs	3 – 4 hrs	5 – 6 hrs	more than 6 hrs
3	159	46	8	6

- *How often do you pass by the Hub during your day-to-day class schedule*? (Total Responses: 200)

Not often	11
Once a day	65
Twice a day	63
Three times	34
Four times	12
Five times	6
Seven times	1
Never	8

- *Do you think the location of the Hub is convenient in relation to your daily schedule*? (Total Responses: 225)

Yes	191
Somewhat	15
No	19

- *What activities provided at the Hub would be most appealing to you*? (Total Responses: 303)

Computer lab	Study area	Cyber cafe
67	121	115

APPENDIX F

Notes from 11/10/04 Meeting with Mark McCallister, Office of Academic Technology

We met with Mark in order to introduce him to members of the new Concept team, to provide team members a tour of OAT services, and to discuss collaboration for projects with which the Libraries and OAT are involved.

Having just returned from the EDUCAUSE conference where a major topic of discussion was collaboration and cooperative ventures, Mark was eager to learn about the status of the Libraries' renovation project. He informed us of the OAT plan to relocate to the HUB on campus, where it would share the real estate with the International Center currently occupying Grinter Hall. OAT staff offices and the Help Center would move completely from CSE to the HUB. A soft space for users would be available: a media center with video and audio production and conference rooms would occupy much of the first floor while a wireless student seating area would be on the second floor, constituting an internet café area.

Although this meeting generally involved discussions of our independent projects, we discussed briefly the usefulness of discussing our plans and possibly working together to plan these spaces.

Our tour of the OAT services included a particularly interesting 3-D visualization corner that included a number of workstations with double screens, digital cameras, and camcorders. We also saw the current audio production room. The CSE classroom had an interesting configuration of workstations in small groups with monitors on arms that swing around. Mark said the arms are much praised by instructors who like the flexibility.

He has agreed to transmit the results of a survey conducted by Susan Tate, Department of Interior Design; they interviewed students about the HUB and what services they would want in that space.

Notes from 12/20/04 Meeting with Mark McCallister, Office of Academic Technology

Mark recently visited the Emory Cox Center and the University of Georgia Student Learning Center and came away feeling that the original HUB plans may have been too formal and structured. Like us, he was very impressed with the Cox Center's fluid and open space.

Update on the HUB:

- Maybe 24/7, but it is beginning to look like they will not get adequate support from the University to staff the area at all times.
- One of the floors originally had a large multi-projector room, but that plan will probably be abandoned in favor of more seating for students. The feeling is that the projection room would be empty much of the time; students are the priority.
- Likewise, they will probably abandon a high-end production studio they had planned for mainly faculty use.

- Although group study areas are still a high priority, they will go to fewer walls and instead create a sense of small group space in other ways (more like the Emory Cox Center.)
- Mark asked if we would be interested in having a “presence” there. We said we thought the library administration would support that and told Mark we would ask right away. Mark needs the go ahead soon, so that he can consult with the architects. The assumption is that OAT would then also have a presence at Library West.
- We talked about duplication of services between the HUB and Library West, and all agreed that redundancy is not a major concern. Students will very likely use all the facilities we can give them.
- Construction and renovation work will begin in late Spring Semester 2005.
- The roof will be raised a little, but otherwise the building must be left intact (Historical Preservation Committee mandate.)
- The larger café originally planned may be changed to a small vending area because Einstein Bagel is just downstairs – why take up the space with another big food area?

Other topics:

- We asked about the CIRCA model of user authentication and how it would work for us since we have quite a few outside visitors using our computers. Mark said there is a temporary account mechanism. The password for these temporary accounts changes daily for security. They would be happy to work with our Systems people on changing Smathers over to this system.

- Mark did not recommend getting into the rental of equipment. He thinks the loss rate would be high and he feels the need is not there for undergraduates. Students have all the electronic gadgets they want; as far as digital cameras go, they are the norm for everyone now.

- The printing system in the labs pays for itself. The software was created in-house and needs updating, but the system still works well. The cost is 10 cents per sheet and it can be charged to the students’ university account.

- Mark offered to come to some of our meetings if we think it would be helpful at any stage of our Info Commons planning.

APPENDIX G

Library Design Student Workshop Feedback

Library staff / Service issues

Make support staff easily recognizable (shirts, badges, etc.)
Staff could be more approachable; they are sometimes unfriendly
Staff on roller skates; have staff go to the clients
Knowledgeable technical staff in the computer area
A special desk for technical questions
Call buttons at the computers
- Students don't like to get up and leave their stuff insecure

Instant messaging or speaker box to call for help
Specialized staff for each section and for various functions
Have a library greeter
Eliminate desk between the staff and clients
Better communication between professors and the library staff
Provide personal assistance librarians

Copy machines

Use gatorlink accounts to buy copies
Easier to use copy machines
Self help for copiers
Instant messaging to the Xerox technicians
Supply change
- closest change is a block away

Card vendor is inconvenient

Raise Awareness of the Libraries

Popup ads about services on UF related sites
Students are not aware of services
Radio announcements
Ads and flyers in the dorms
Give points for time visited and awards … like on Fridays / Frequent visitor cards
Coffee shop…food and drink draw people
Open doors of smaller collections …longer hours
Look inviting
Reduce Jargon (i.e. what are "stacks"?)
Put up "open" signs
Showcase special materials
Library orientation party day…open house
Large mall-like maps
Make fun shirts about each library to pass out to staff
Rotate the library faculty so they become more familiar w/each library
Pass out flyers at Turlington
UF library day…free food, workshops
Have special events with refreshments
Have library commercials on local TV stations

Show consistent signage
Have a pamphlet describing each library
Have big maps for each library posted at front of each library
A real marketing and promotion program – public relations
Bestseller/popular reading section
Current Events section
Website does not promote services and events
Put on events in library showcasing films, music, etc.

Software/Hardware

Soundproof collaboration room with projectors, laptops, memory/white boards
Quiet keyboards
Lots of computers with same software and accessibility
Wireless access
More power/network outlets everywhere, tables, desks and carrels
Ability to watch classes and videos
Better use of portable technology, such as laptop/pda/cell that integrate w/ library system
PCs for video/audio, email, book lookup
Entertainment tools: playstation, cable tv, etc.
Kiosk that provide mobile technology
More updated machines and software
Downloading ability
Metasearch function: single interface to search across databases
Laptop checkout

Environment

No community space
Divide into zones:
- Self checkout
- Tech zone
- Reference zone
- Laptop zone
- Group study/Collaboration zone
- Quiet study zone
- Relaxing zone

Comfortable environment
Good carpet
Large community tables and special rooms you can reserve in advance
Café with couches, lounge chairs, tv, open all hours
Ergonomically designed study areas
Soundproof group study
Better lighting
Better ventilation/air quality
Light background music
Art on Walls
Student Work Showcase
Real Flowers/Plants
Clocks
Less claustrophobic, more open spaces

Large desks
Uplifting/Inspiring wall colors
Windows
Cushy furniture
Compact shelving problem for disabled
Collapsible walls to easily reconfigure space
Auditorium
Instructional Space

Signage/Directional

Unified signage
Solutions to common problems posted (signage?)
Less negative/punitive signage
(i.e. NO Cell Phones, NO Talking, etc.) Better: *Cell Free Zone*
Boards that change w/ answers to reoccurring questions
Huge signs with call numbers
Overhead navigation system
Map Stations/Help Info stations throughout library
Larger and readable sings
Designated areas should be better marked (i.e. Quiet Study Only)