Computer Lab Management (CLM) operates 17 computer rooms across the UC Davis campus. Utilization of CLM services continued to be very high in Fall 2006. CLM recorded the highest values of reserved hours, total logins, and unique users ever. During Summer 2006 CLM opened a new computer classroom in 2060 SLB. CLM believes the added capacity of 2060 SLB, the renovation of 163 Shields, and overall increase in number of students drove the increases in utilization.

CLM is concerned that the high utilization is not allowing us to serve all our clients’ needs. Therefore, we are working with other campus units to attempt to increase the computer room space on campus. The first priority is to develop another high-end multimedia classroom to address the extremely high utilization of 1102 Hart. However, given the overall space constraints on campus there is no immediate solution.

Goals and Accomplishments

Pilot Wireless Printing

*Status:* Completed

CLM piloted a system that allows campus clients to print from their laptops to printers in selected campus computer rooms. The pilot started on October 30th by allowing clients to print to 177 MU or 1101 Hart. During Winter Break CLM expanded the system to allow clients to also print to 75 Hutchison, 1154 Meyer, and 15 Olson. The service was well received by clients, who printed a total of 635 print jobs wirelessly during Fall 2006. To use this service, clients need to set up a new printer on their laptop and install the correct printer driver. For more information, visit the Wireless Printing Web page at [http://wirelessprinting.ucdavis.edu](http://wirelessprinting.ucdavis.edu). Sheets printed this way are counted toward the same quota as standard printing within the IET computer rooms.

163 Shields Wait Line Display

*Status:* Completed

CLM renovated the computer lab in 163 Shields over Summer 2006. This computer lab has a major issue with a long wait line outside of the room blocking access to adjacent rooms. Therefore, CLM developed a website that shows the number of standup and sitdown stations free in 163 Shields, including a graphical layout showing where those free stations are located. CLM worked with Shields Library staff and CTS staff to mount a 27 inch computer display above the door to 163 Shields to show this website. The system has proven to be very successful and allows clients to easily see how many stations are free in 163 Shields.

Conduct a faculty survey

*Status:* Completed

As part of an annual process to identify our clients’ needs, Computer Lab Management surveyed faculty who used computer classrooms during the Fall 2006 Quarter. 29 faculty members responded. CLM evaluates the responses to determine areas where we meet client needs and where we can improve our services. The survey results can be found at [http://clm.ucdavis.edu/pubs/survey/faculty_f06.html](http://clm.ucdavis.edu/pubs/survey/faculty_f06.html).
Migrate Classroom Technology Services to Exchange

*Status:* In Progress

CTS began its part of an IET wide email and calendar migration to Microsoft Exchange this Fall. CTS converted two-thirds of its staff to MS Exchange email and is about three-fourths finished with the overall migration project. We converted approximately 70 student departmental email accounts to Exchange over the Winter break.

Podcast Service Continues to Expand

*Status:* Completed

With the installation of more digital recorders during Summer 2006, the podcasting service continues to expand. In Fall 2006, 24 classes were digitally recording and podcasting their lectures. The increase in classes came primarily from departments that utilized the cassette tape service in previous years and are migrating to the new digital service. As such, the drop-off in cassette tape checkouts from the Hart Media Distribution Lab has been dramatic- from 5233 checkouts in Fall 2005 to 298 checkouts in Fall 2006.

Statistical Summary

**Utilization**

**Overall computer room utilization**

Computer Lab Management operates 17 computer rooms at UC Davis, consisting of computer classrooms, open access computer labs, and media rooms. The computer rooms experience high utilization during peak hours (9:00 am to 6:00 pm). Most open access labs and some classrooms also experience long wait lines. The graph below combines utilization Monday through Thursday for CLM’s 11 computer classrooms and 4 open access computer labs.
Utilization exhibits the behavior seen in past quarters, being highly impacted from 9am to 6pm with considerable evening utilization as well. However, the average wait line decreased from the 05-06 academic year. There are two possible causes for this decrease – the opening of 2060 SLB and increasing reserved class hours which effectively force the wait line for the classroom to zero.

Class Use
During the Fall 2006 quarter there were 3706 class hours reserved in the computer classrooms. This is the highest total reserved hours in CLM history. The addition of the 2060 SLB computer classroom in Summer 2006 only added a few reserved hours directly. However, the opening of 2060 SLB allowed CLM to renegotiate the Memorandum of Understanding for 2020 SLB. The new agreement allowed CLM to schedule more classes in 2020 SLB and greatly increase the class hours in 2020 SLB.

![Fall Quarter Reservations](image)

Number of Logins and Users
The total logins in Fall 2006 increased to 337,207, which is the highest number of logins per quarter recorded. The renovation of 163 Shields increased the number of clients who could use the room and therefore the logins from 34,680 in Spring 2006 to 52,359 in Fall 2006.

![Total logins per quarter](image)
**Unique Users**
The number of unique users increased to 19,624 in Fall 2006. This is the highest number of unique users CLM has served in a quarter. Of these, 18,966 were students.

The increases in both total logins and unique users were most likely caused by opening the new computer classroom in 2060 SLB and the increase in student population.

**Printing**
The total sheets printed in Fall 2006 decreased to 1,286,893, which is a drop of 21% from Spring 2006. This decrease was caused by a change in the printing rates during Summer 2006. Before Summer 2006 each client was allotted 100 free sheets per quarter. CLM changed the print quota to 60 free sheets and 30 grace sheets. The change in printing rates created a large effect in student printing behavior. The average sheets per client dropped from 97 in Spring 2006 to 75 in Fall 2006. This data includes the 635 sheets printed wirelessly. CLM expects the amount of pages printed wirelessly to grow as the service is expanded and promoted (see “Pilot Wireless Printing” above for more information).
In addition, there were 622 color pages printed in the Meyer Media Lab. This was a large decrease from the 949 color pages printed in Spring 2006. CLM is unsure what caused this change and will watch future developments closely.

![Color pages printed graph]

**Software**

During Fall 2006 web browsers outpaced all other software use and accounted for 63 percent of all software usage. Web browsers are used by students to access email, access materials on class web pages, and perform online research. Web browsers have become the primary way for students to retrieve instructor prepared materials.

![Software Use graph]

**Media Distribution Lab**

The Hart Media Distribution Lab (MDL) holds class materials such as DVDs, video tapes, audio tapes, slide sets, and notes for students and faculty to checkout and view in the facility. Faculty typically put these class materials on reserve at the MDL instead of the Library since the facility has VCRs, DVD players, audio players, and slide carrels permitting clients to check out and view the material in the same room.
location. Additionally, there are 18 iMac computers dedicated for viewing computer-based instructional software modules.

The MDL at 1101 and 1102 Hart functions as both a distribution center and as a classroom. The graph below measures the MDL's primary transactions. Specifically, it shows the total number of material checkouts and number of computer logins during Fall 2006. The number of material checkouts is declining – due to the shift from cassette checkouts to digital lecture distribution.

![Fall Quarter Transactions Graph](image-url)

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<thead>
<tr>
<th>Quarter</th>
<th>Checkouts</th>
<th>Logins</th>
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<tbody>
<tr>
<td>Fall 2001*</td>
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<tr>
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<tr>
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<td>Fall 2006</td>
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