Computer Lab Management (CLM) operates 17 computer rooms across the UC Davis campus. Utilization of CLM services continued to be very high in Winter 2007. CLM recorded the highest values of reserved hours and total logins ever. The number of unique users dropped slightly from Fall 2006, but that is normal considering that some students graduated.

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. During Spring Break CLM was able to add hardware and software to 93 Hutchison that will relieve some of the scheduling pressure on 1102 Hart. We hope this will allow us to better meet the need for high-end multimedia classes in our computer classrooms.

Goals and Accomplishments

Upgrade 93 Hutchison to Accommodate Multimedia Classes

Status: Completed
CLM upgraded 93 Hutchison over Spring Break to allow high-end multimedia based classes to be scheduled there. The classes are usually scheduled in 1102 Hart, but that room has become so impacted it is difficult to schedule all the classes that want to use it.
CLM installed Adobe Create Suite, Macromedia Studio 8, several Adobe fonts on all the PCs. In addition, 9 Epson Perfection 4490 scanners were installed. These changes allow two Design classes to take place in 93 Hutchison for Spring quarter.

Expand Wireless Printing

Status: Completed
CLM expanded wireless printing to include 163 Shields as a printing destination. The available destinations are now 177 MU, 163 Shields, 75 Hutchison, 1101 Hart, 1154 Meyer, and 15 Olson. The service was well received by clients, who printed a total of 2,093 print jobs wirelessly during Winter 2007. For more information, visit the Wireless Printing Web page at http://wirelessprinting.ucdavis.edu.

Install Teamspot in 1154 Meyer

Status: In Progress
CLM prepared to install Teamspot (http://tidebreak.com/prodteamspot.shtml) in 1154 Meyer. We purchased a Mac Mini, 46” HDTV display, and the Teamspot software. The equipment was configured and software installed to prepare for installation in 1154 Meyer during Spring quarter.

Conduct student surveys

Status: In Progress
To help identify areas to improve our quality of service and meet user needs, CLM conducted two student surveys. CLM emailed each survey to 2,000 students who used our labs during Winter 2007. The first survey focused on students’ computer ownership and experience in the computer rooms. The second focused on student laptop use. The results for these surveys will be available in a few weeks at http://clm.ucdavis.edu/pubs/survey/student-w07-1.html and http://clm.ucdavis.edu/pubs/survey/student-w07-2.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. The remaining CTS users’ email was converted to Exchange. The project will convert all users’ calendars to Exchange in April 2007.

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. The wait lines increased slightly from Fall 2006. The wait lines are averaged over the entire quarter, so the maximum wait line of 40 on 3/13/07 is quite a bit higher.
Class Use
During the Winter 2007 quarter there were 3,717 class hours reserved in the computer classrooms. This is the highest total reserved hours in CLM history.

During Winter 2007, there were 119 class software installs and 95 class folders created. The class software installs are higher than normal since one class (ECL 290) required 19 programs!

Number of Logins and Users
The total logins in Winter 2007 increased to 340,691. While this is a small increase over Fall 2006, it is still the highest number of logins in CLM history.

The following table shows the breakdown of length of sessions for various computer station types.

<table>
<thead>
<tr>
<th></th>
<th>&lt; 15 min</th>
<th>15-30 min</th>
<th>30-45 min</th>
<th>45-60 min</th>
<th>1-2 hr</th>
<th>2-3hr</th>
<th>&gt; 3 hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td>31%</td>
<td>14%</td>
<td>9%</td>
<td>9%</td>
<td>30%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Standup</td>
<td>89%</td>
<td>9%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>All Open Access</td>
<td>76%</td>
<td>12%</td>
<td>4%</td>
<td>3%</td>
<td>4%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

As expected, almost all standup station sessions are less than 15 minutes. That statistic significantly affects the breakdown for all Open Access stations, but there are some sessions that last longer. The classroom breakdown shows that there is peak for 1-2 hours, which matches the length of most classes.
in the computer classrooms. However, this is still a significant percentage at less than 15 minutes. This is because classrooms are treated as open access when not reserved.

**Unique Users**
The number of unique users was 19,228 in Winter 2007. Of these, 18,505 were students. The number of unique users decreased slightly from Fall 2006. This is normal as some students graduate after Fall quarter.

![Number of Clients per Quarter](image)

**Printing**
The total sheets printed in Winter 2007 increased slightly to 1,380,549, a 7% increase from Fall 2006. However, the sheets printed are still less than in 05-06. The decrease from 05-06 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 80 in Winter 2007. We expect the total sheets printed and average sheets per client to increase slowly over time as students realize that printing is still relatively inexpensive.
In addition, there were 783 color pages printed in the Meyer Media Lab.

CLM expanded the wireless wireless printing system to six locations during Winter quarter. Wireless printing has been quite popular as this graph of wireless printing jobs shows.

**Software**

During Winter 2007 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.
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 location. Additionally, there are 18 iMac computers dedicated for viewing computer-based instructional software modules.

Faculty have transitioned from recording lectures on audio tapes to using podcasting. The graph below shows how the growth in podcasting corresponds with a decline of checkouts in Hart. There are no more audio tape checkouts in Hart, so the remaining checkouts are mostly faculty reserving video tapes or DVDs to show in class.