Computer Lab Management (CLM) operates 17 computer rooms across the UC Davis campus. Utilization of CLM services continued to be very high in Spring 2007. CLM recorded the highest values of reserved hours ever, as faculty demand for computer classroom teaching time continues to grow. The number of unique users dropped slightly from Fall 2006 and Winter 2007, but that is normal considering that students graduate throughout the school year. CLM is concerned that the high utilization is not allowing us to serve all our clients’ needs. Therefore, we will attempt to collaborate with other campus departments to attempt to increase the computer classroom space on campus.

Goals and Accomplishments

Upgrade Computers in 1102 Hart

Status: Completed
CLM upgraded 1102 Hart to Apple Mac Pro towers with two 2.66GHz dual-core Intel Xeon processors, 4GB RAM, 500 GB hard drive, SuperDrive (CD-RW/DVD-RW) and 20" flat panel monitors during Summer Break. The software was also upgrade to Mac OS X 10.4.9, Adobe Creative Studio 3, and Apple Final Cut Studio 2.

Plan for Summer Upgrades and Renovations

Status: Completed
CLM finalized its summer upgrade plans for its facilities. In addition to supporting summer classes, CLM will undertake significant hardware and facilities upgrades. As part of an established upgrade cycle, CLM will replace approximately 240 computers in nine computer rooms: 241 Olson, 247 Olson, 1131 Meyer, 1154 Meyer, 1101 Hart, 177 MU, 2020 SLB, 2060 SLB and 75 Hutchison. CLM will install Dell Optiplex 745 computers with Core Duo 2.40 GHz, 4 GB RAM, a 160 GB hard drive and a 17 inch LCD monitor; Apple Mac Book computers with Core Duo 2.0 GHz, 2 GB RAM, 80 GB hard drive and 13 inch screen; and Apple iMac computers with Core Duo 2.166 GHz, 2GB RAM, 160GB hard drive and 17 inch monitor.

In addition to scheduled equipment replacement, CLM has also planned an extensive renovation and redesign of 177 MU. CLM will install brand new furniture including an ADA compliant station with an electric lift. CLM will also improve the lighting and electrical system, replace the carpet with tile flooring, and paint the room.

Install Maya 8.5 in 1154 Meyer and 1102 Hart

Status: Completed
CLM installed Maya, a high end 3D modeling and rendering package, in 1154 Meyer and 1102 Hart. This package was used by two classes in Spring 2007 and we expect usage to grow now that faculty are aware it is available.

Transfer Statistical Applications from L&S to 93 Hutchison

Status: Completed
The College of Letters and Science closed their Division of Social Sciences (DSS) Computer Lab during Spring Break. CLM and L&S worked to transfer the licenses for SPSS, Stata and Eviews from the DSS lab to 93 Hutchison. The classes that require those software packages also moved from the DSS lab to 93 Hutchison for Spring Quarter.
Participate in annual Picnic Day
Status: Completed
On April 14, 2007 CLM took part in UC Davis’ 93rd annual Picnic Day. The Hart Media Distribution lab was open to the public for events and exhibits. CLM student employees organized and staffed the event. They determined the class schedules and exhibits, created lesson plans, and taught classes. This year they taught the following classes: Picture Perfect (Photoshop CS), Movie Magic (iMovie), and Amateur Animation (Flash). The classes were well attended. New exhibit this year were a Teamspot Demo and SmartSite demo. Additionally, student employees coordinated with Apple representatives to display some of their latest computer hardware.

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 have remained fairly consistent over the 06-07 school year. The wait lines are averaged over the entire quarter, so the maximum wait line of 43 on 5/31/07 is quite a bit higher.
Class Use
During the Spring 2007 quarter there were 3,742 class hours reserved in the computer classrooms. This is the highest total reserved hours in CLM history.

During Spring 2007, there were 92 class software installs and 94 class folders created.

Number of Logins and Users
The total logins in Spring 2007 decreased slightly to 336,535. The quarterly average for the 06-07 school year was 338,144. For the 06-07 school year there were 1,139,262 total logons.

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>2-3 hr</th>
<th>&gt; 3 hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td>33%</td>
<td>14%</td>
<td>9%</td>
<td>9%</td>
<td>28%</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 18,726 in Spring 2007. Of these, 17,989 were students. The number of unique users decreased slightly from Fall 2006 and Winter 2007. This is normal as some students graduate after Fall quarter.

**Printing**
The total sheets printed in Spring 2007 was 1,389,282, essentially the same as Winter 2007. 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 83 in Spring 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 869 color pages printed in the Meyer Media Lab.
CLM expanded the wireless printing system to six locations during Winter quarter. Wireless printing has been quite popular as this graph of wireless printing jobs shows. 437 unique clients printed though the wireless printing system during Spring quarter.

**Software**

During Spring 2007 web browsers outpaced all other software use and accounted for 64 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, and slide sets 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.