Fall 2009 Quarterly Report
Computer Lab Management
Prepared by Tim Leamy

Computer Lab Management (CLM) operates 18 computer rooms across the UC Davis campus. These consist of 11 computer classrooms and 7 open access labs with a total of 566 installed stations.

In the coming years, CLM expects faculty members to continue to adopt and integrate more educational technology into their classroom teaching. Consequently the demand for technology-aided and technology-focused classes will grow. Therefore, CLM is looking for ways to add computer classrooms or reconfigure existing rooms to add more computer stations.

Some of the significant items from Fall 2009 include:
- Due to the campus budget issues CLM made substantial changes to our operations. These changes include increasing the printing rates, reducing the hours the computer rooms are open, and increasing our computer replacement cycle from three years to four years. Overall the number of open hours decreased 11% from last year. CLM focused the closures on the less used evening and weekend times to limit the impact on our clients.
- CLM updated the printing rate for black-and-white printing to 11 cents per two-sided sheet at the start of Fall quarter. In addition, there are no longer any free sheets. However, anyone printing 30 sheets or less per quarter will have their bill waived, as long as they do not print more than 30. But once they print 31 sheets (or more), they will be billed for all 31 sheets, plus any others they print during the quarter.
  These rates essentially make the printing operation self-sustaining, and allow us to keep our high-demand computer labs by funding 70% of the cost to maintain those computer labs. More importantly, these rates allow CLM to provide a service to the students that is still less expensive than any other printing option.
- The number of sheets printed dropped to 1,002,473, a decrease of 37% from Spring 2009. A decrease was expected since the printing rate increased, but this decrease was larger than expected. We expect the sheets printed to slowly increase as students become accustomed to the new rate and realize that printing is still relatively inexpensive.
- The total number of logins decreased to 337,840, a drop of 14.5% from Spring 2009. This drop is likely due to a combination in the decrease of open hours and the printing rate change decreasing demand. Surveys indicated that printing was the primary reason that many students used the open-access labs, and therefore a reduction in printing demand translates to less logins.
- CLM surveyed instructors who taught in the computer classrooms during Fall 2009. The results are posted at http://clm.ucdavis.edu/pubs/survey/faculty_f09.html.

Statistical Summary

Utilization

Overall computer room utilization

Computer Lab Management operates 18 computer rooms at UC Davis. These computer rooms experience high utilization during peak hours (9:00 am to 6:00 pm). Most open access labs also experience wait lines. The graph below combines utilization Monday through Thursday.
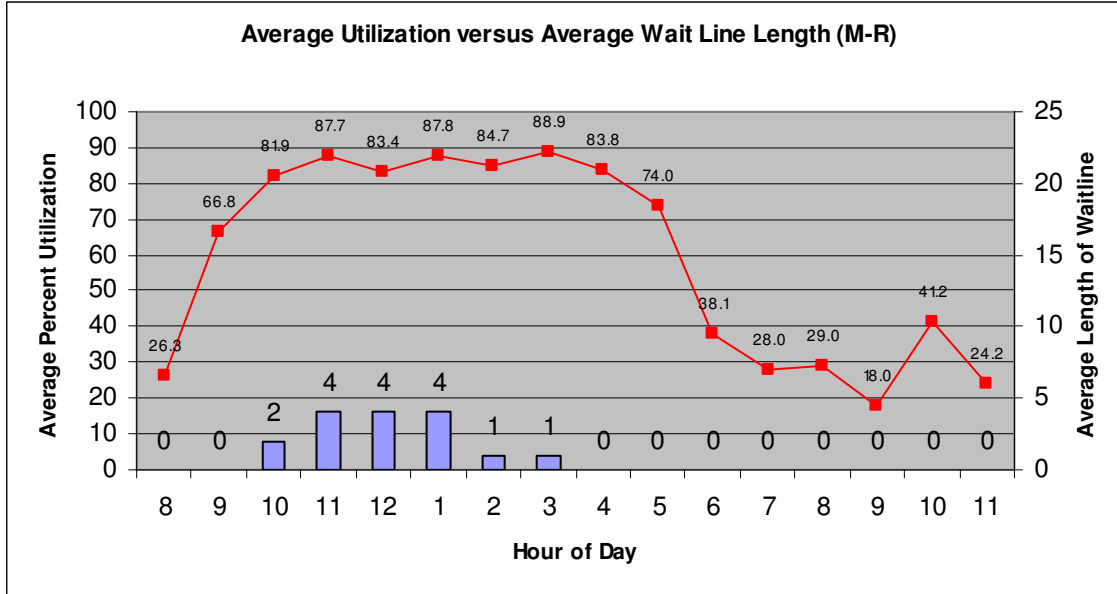

Utilization shows the general trend of high usage from 10am to 5pm continued this quarter. The average wait lines in Fall 2009 were quite a bit lower than in past quarter. This is likely caused to the decreased demand due to the printing rate change.

The wait line data in the graph is the average wait line for the entire quarter. The maximum wait line length of 46 on December 2nd is many times the average. Past student surveys show only roughly 25% of students would wait if there was a line of 10 people. Therefore, CLM's wait line statistics are most likely not an accurate measure of demand during busy times.

Class Use

During Fall 2009 there were 3,902 class hours reserved in the computer classrooms. This total is down slightly from the 3,951 hours in Fall 2008.
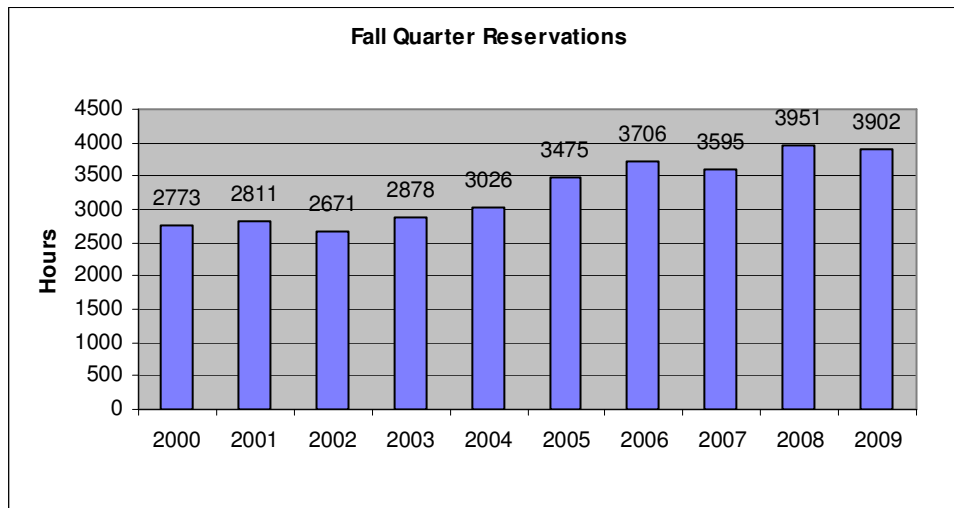
In addition, there were 105 class software installs and 95 class folders created during Fall 2009.

Number of Logins and Users

The total logins in Fall 2009 decreased to 337,840. This was a large decrease from the 08-09 average of 392,096. The decrease is likely caused by the decreased demand due to the printing rate change.

Total logins per quarter
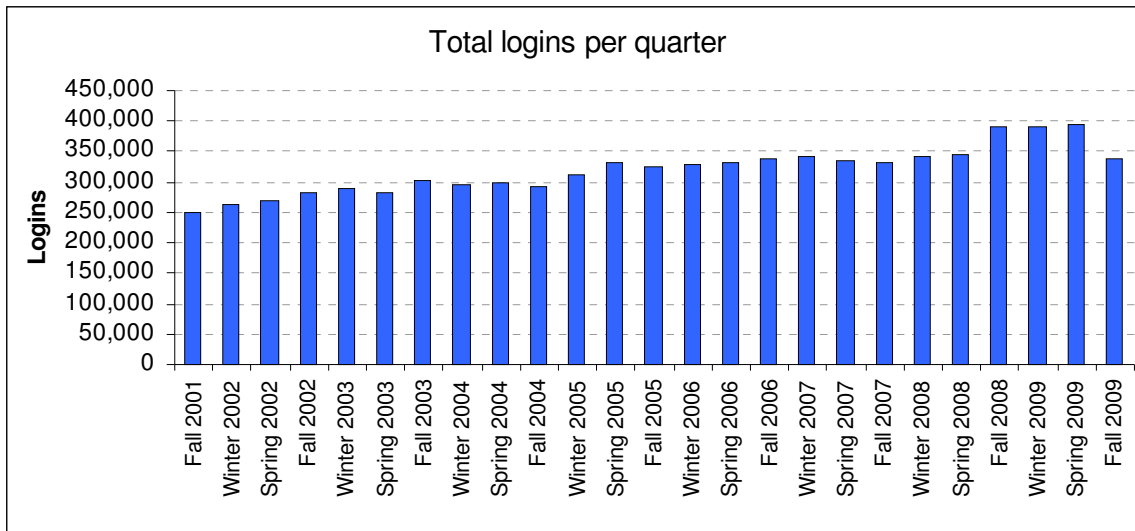
Unique Users

The number of unique clients increased to 20,905 in Fall 2009. This is an increase of 586 clients from Spring 2009. Of these, 20,309 were students. The total and student unique clients are down slightly from the high of Fall 2008.

**Number of Unique Clients per Quarter**
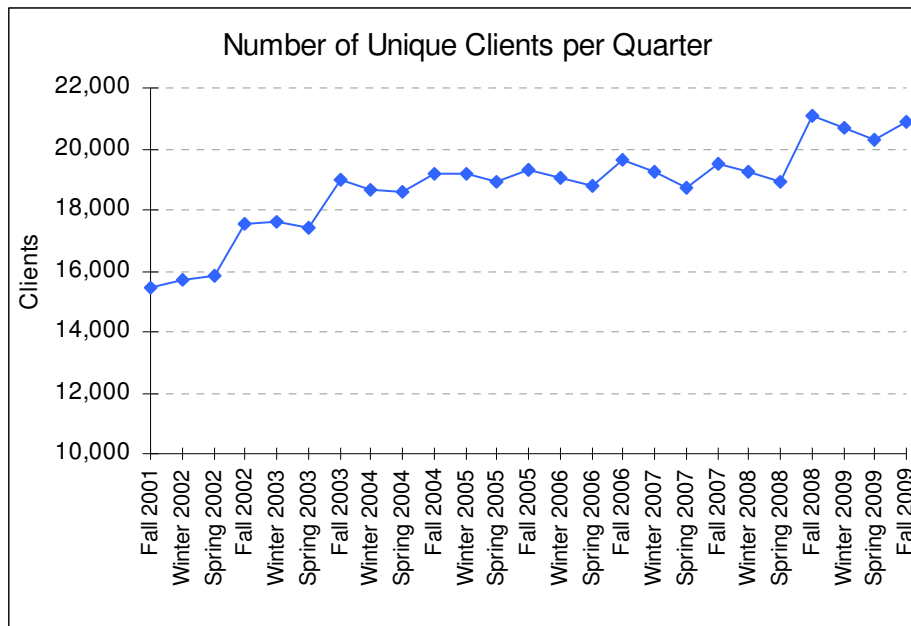
Printing

The total sheets printed in Fall 2009 decreased dramatically to 1,002,473. The average sheets printed per client (of those who printed) was 54.2. The large decrease of 37% was due to the change in printing rates at the start of Fall quarter. We expect the total sheets printed and average sheets per client to slowly increase as students become accustomed to the new rate and realize that printing is still relatively inexpensive.

Sheets Printed per Quarter

Number of Sheets - Millions
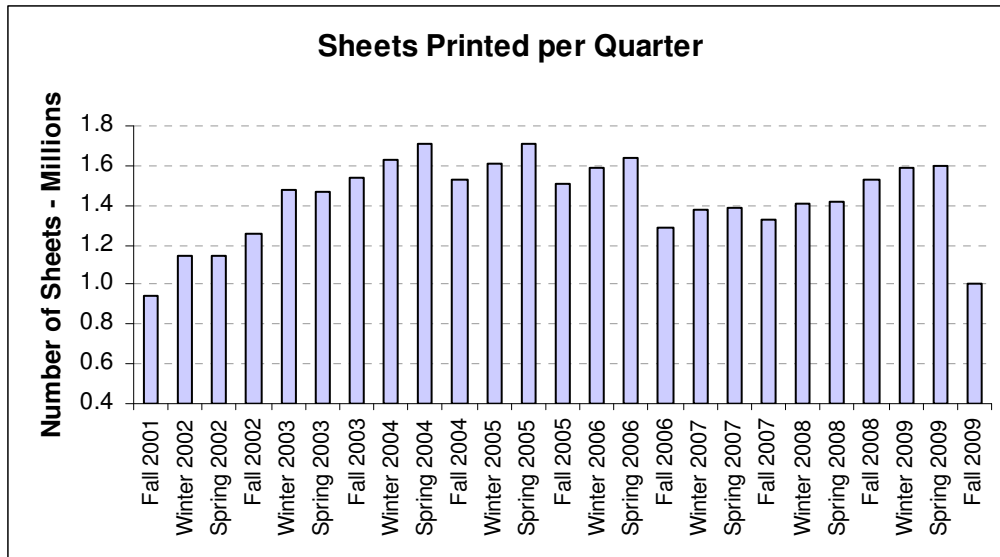
In addition, there were 3,431 color pages printed, a decrease of 795 from Spring 2009.

Color Pages Printed
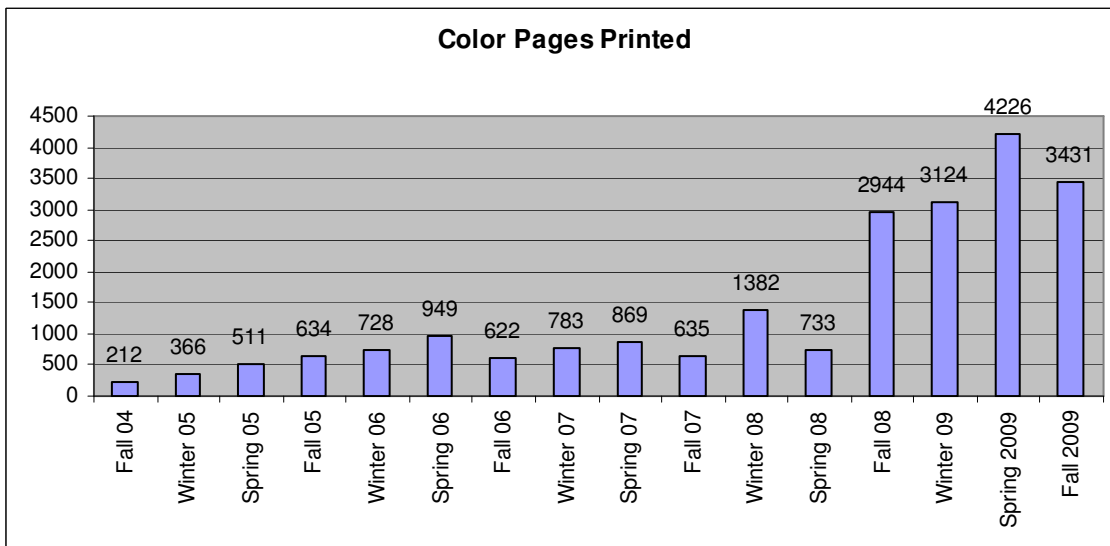
There were 3,422 wireless print jobs, a decrease of 4,653 from Spring 2009. There were 453 unique clients who printed though the wireless printing system. The drop in wireless printing usage was most likely due to the overall drop in printing caused by the printing rate increase.

Wireless Print Jobs