

# Spring 2012 Quarterly Report

## Computer Lab Management

Prepared by Tim Leamy

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Computer Lab Management (CLM) operates 18 computer rooms across the UC Davis campus. These consist of 12 computer classrooms and 6 open access labs with a total of 558 installed stations.

CLM recently increased the number of computer classrooms by one and we have already seen an increase in reserved hours for future quarters as faculty and departments take advantage of the additional computer classroom. 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 additional ways to add computer classrooms or reconfigure existing rooms to add more computer stations.

Some of the significant items from Spring 2012 include:

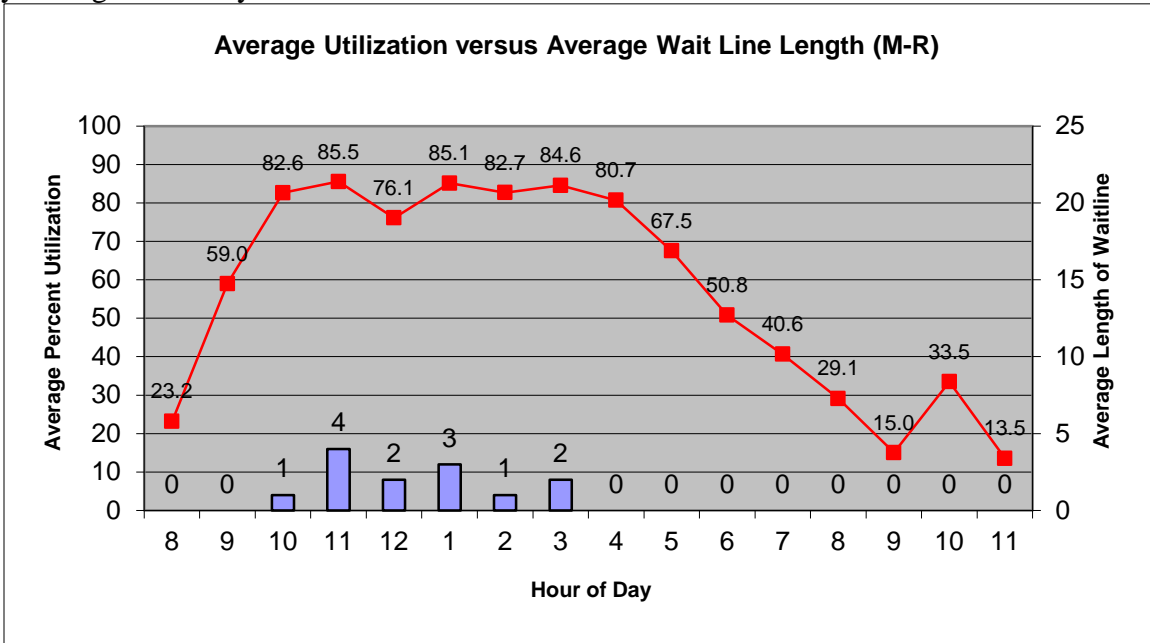
- CLM has reduced the amount of open hours by 14.2% from Fall 2008. These cuts were driven by the ongoing campus budget crisis. This decrease in availability likely caused some of the drop in overall logins and printing we have seen.
- CLM continued planning to move the computer classroom from 1131 Meyer to Hutchison Hall over Summer 2012. Rooms 76/78/86 Hutchison will be renovated into an open-access lab, the open-access computer lab in 75 Hutchison will move to the renovated space, and the classroom in 1131 Meyer will move to 75 Hutchison. This consolidation will allow a saving in student salaries while preserving a similar level of service for our clients
- CLM performed a soft rollout of the "IET Virtual Lab". This system allows clients to RDP to PCs in closed computer rooms after hours to access specialized, expensive software. We also have 4 additional PCs set up in the Virtual Lab so clients can access some of the software during the day. Any campus affiliate (students, faculty, staff) can connect from anywhere (on-campus or off) using almost any type of computer (Windows, Mac, Linux, iPhone/iPad, Androd, etc.). The Virtual Lab can be accessed by following the instructions at <http://clm.ucdavis.edu/virtual/>. There were 1,299 connections to the Virtual Lab from 286 unique clients from 4/25-6/24.
- The number of black & white sheets printed in Spring 2012 decreased slightly to 919,074 (a drop of 0.7% from Winter 2012). However, both Winter & Spring 2012 printing were higher than Fall 2011 and we believe opening the SCC in Winter 2012 caused the increase in printing. There was a large decrease from the 08-09 printing levels due to a new printing rate implemented in Fall 2009, but the sheets printed appear to have leveled out in recent quarters. We had expected that sheets printed would drop significantly initially but then slowly increase as students become accustomed to the new rate. It remains to be seen if the printing levels will increase in the future.
- The total logins in Spring 2012 increased to 283,754, up 1.7% from Winter 2012. The number of logins has dropped from 08-09, most 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 fewer logins.
- Computer classroom reservations have stayed relatively constant since the 08-09 academic year. The computer classrooms are reserved on average about 35 hours per week, which is the realistic maximum since most faculty try to avoid teaching in the early morning, evening, and Friday afternoons.
- CLM prepared for Summer 2012 planned upgrades by purchasing hardware and software, implementing and testing software configurations, and developing a project plan.
- CLM conducted a faculty survey about computer room use. The results are posted at [http://clm.ucdavis.edu/pubs/survey/faculty\\_s12.html](http://clm.ucdavis.edu/pubs/survey/faculty_s12.html).

# Spring 2012 Statistical Summary

## Utilization

### Overall computer room utilization

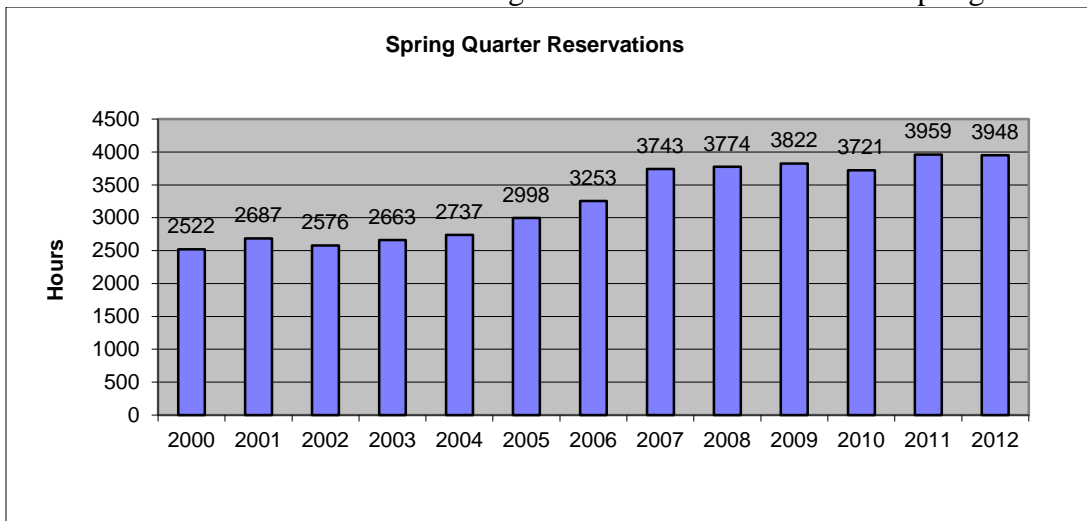
Computer Lab Management operates 18 computer rooms at UC Davis. These computer rooms experience high utilization between 10:00am to 5:00pm, which continues the trend from previous quarters. Most open access labs also experience wait lines. The graph below combines utilization Monday through Thursday.



The wait line data shown is the average wait line for the entire quarter. The maximum wait line of 29 on June 6th is many times the average. Past student surveys show roughly only 25% of students would wait if there were line of 10 people. Therefore, CLM's wait line statistics are most likely not an accurate measure of demand during busy times.

### Class Use

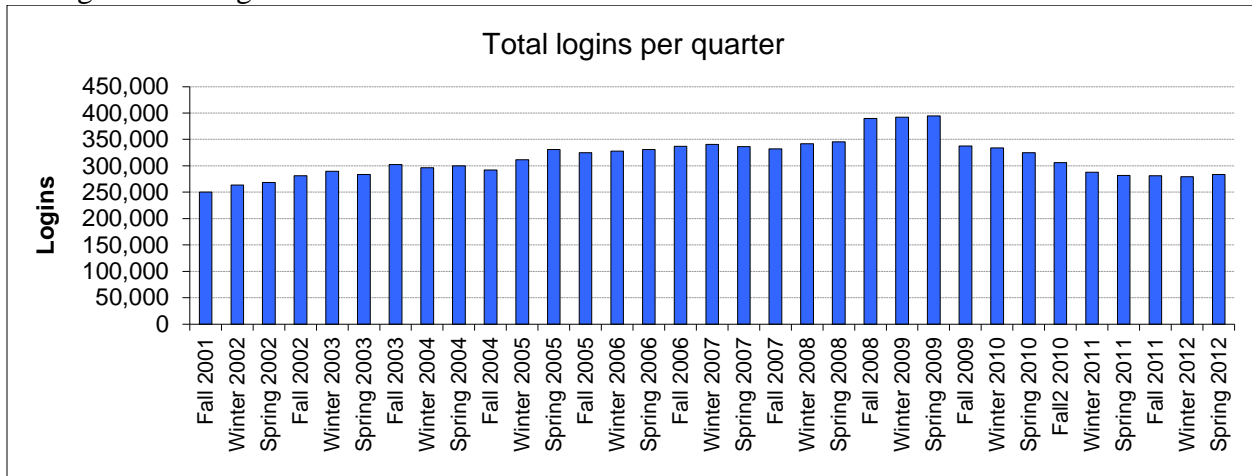
During Spring 2012 there were 3,948 class hours reserved in the computer classrooms. This was an increase of 309 hours from Winter 2012 and a slight decrease of 11 hours from Spring 2011.



In addition, there were 148 class software installs and 87 class folders created during Spring 2012.

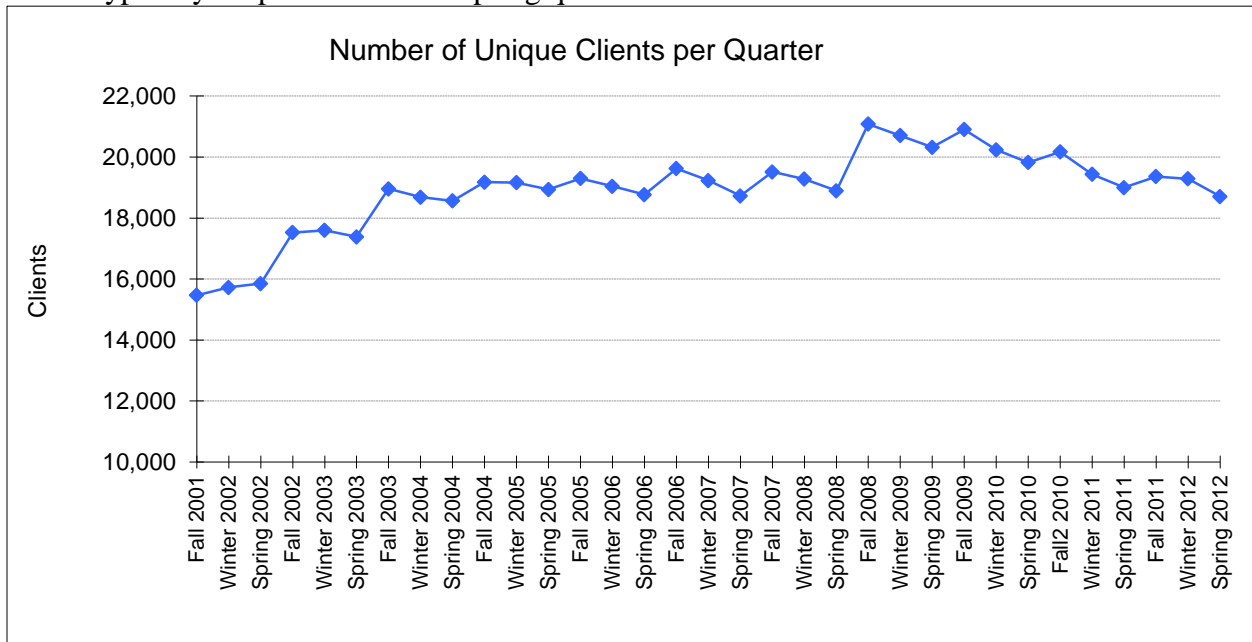
## Number of Logins and Users

The total logins in Spring 2012 increased to 283,754, up 1.7% from Winter 2012. The number of logins has dropped from 08-09, most likely due to a combination in the decrease of open hours and the printing rate change decreasing demand.



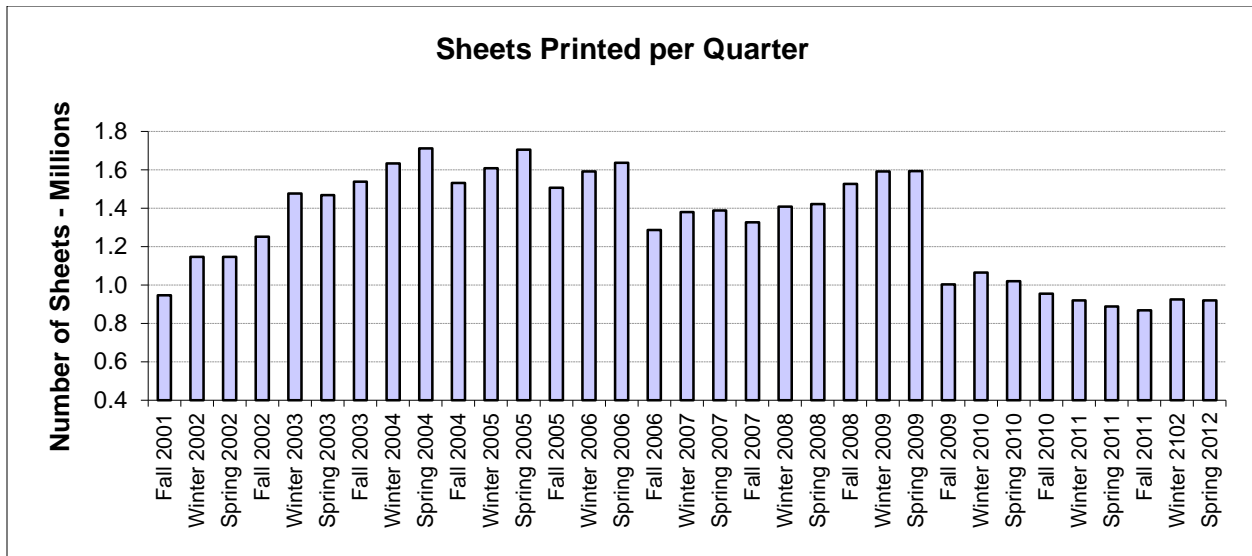
## Unique Users

The number of unique clients decreased to 18,704 in Spring 2012. Of these, 18,229 were students. This is a decrease of 585 clients from Winter 2012. The decrease is normal as the total number of students at UC Davis typically drops from Fall to Spring quarter.

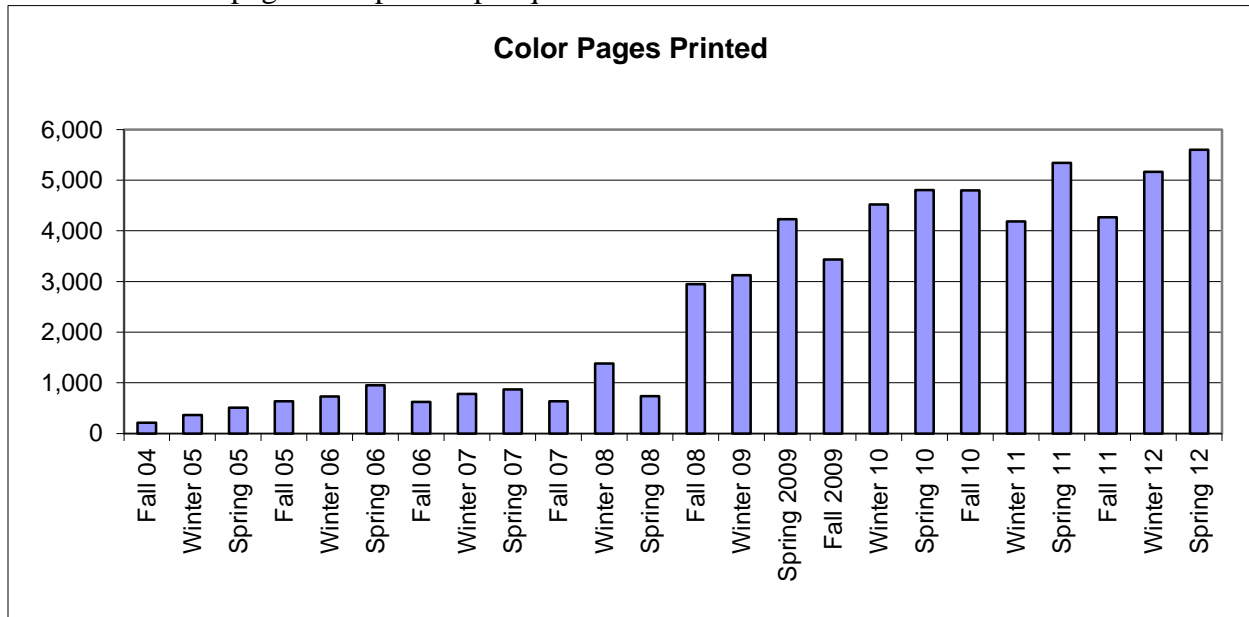


## Printing

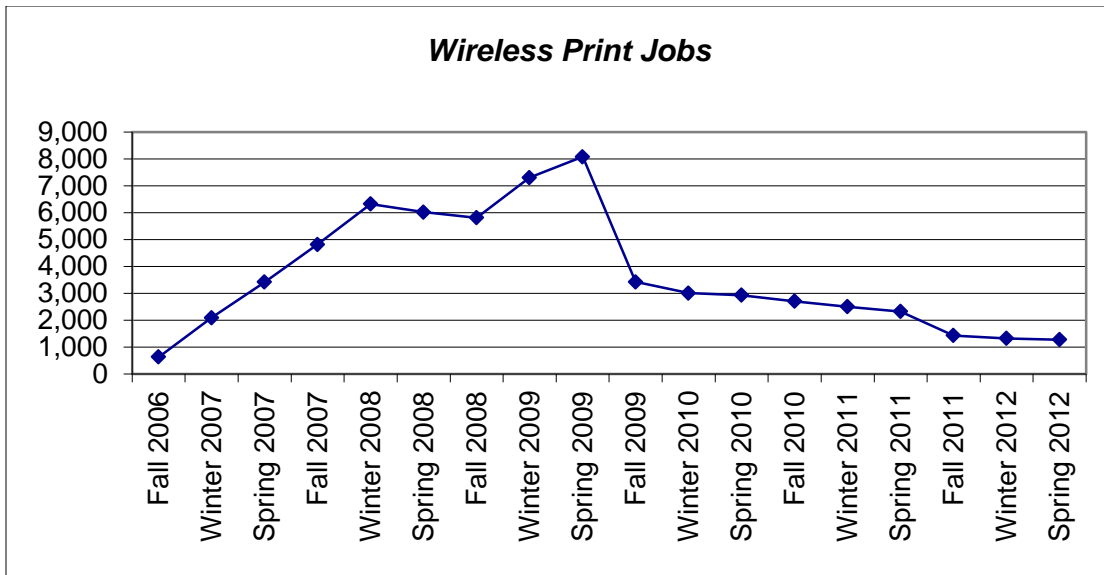
The total sheets printed in Spring 2012 decreased slightly to 919,074 (a drop of 0.7%). The average sheets printed per client (of those who printed) was 57.57. The large decrease from 08-09 was due to the change in printing rates at the start of Fall 2009.



In addition, there were 5,600 color pages printed, an increase of 453 from Winter 2012. This is the highest total of color pages ever printed per quarter.



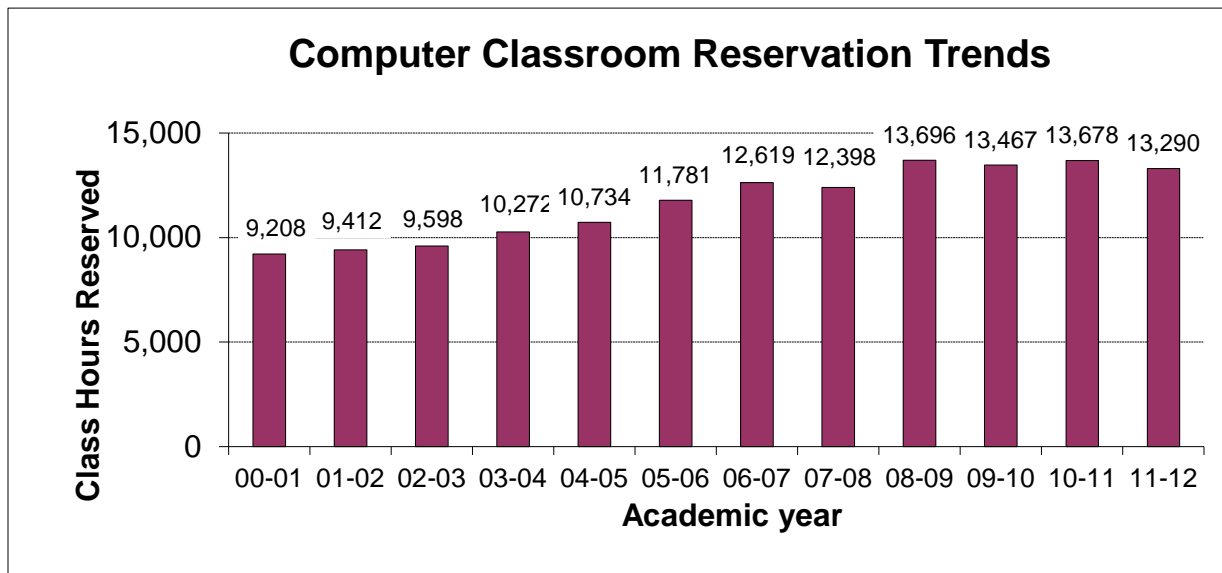
There were 1,277 wireless print jobs, a decrease of 44 from Winter 2012. There were 172 unique clients who printed though the wireless printing system. The drop in wireless printing usage from 08-09 level is most likely due to the overall drop in printing caused by the printing rate increase.



## Review of Annual Data

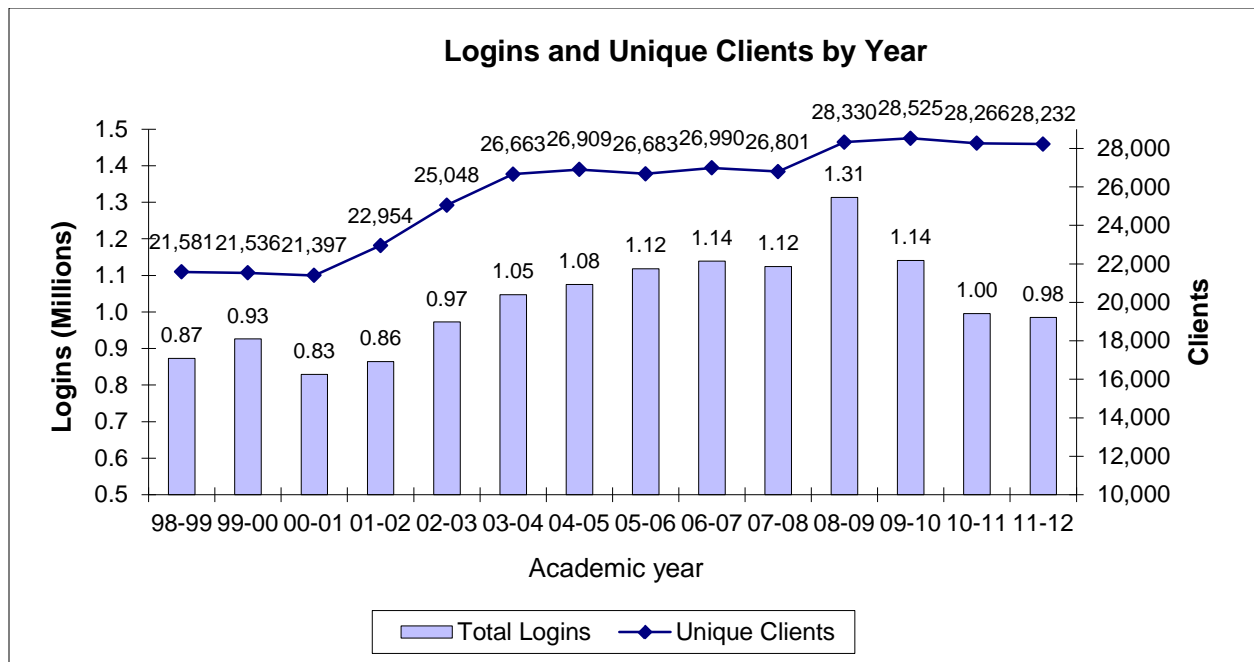
Since Spring quarter is the end of the academic year CLM includes annual trends in this quarterly report.

The overall computer classroom reserved hours have been relatively constant since the 08-09 year. Based on the fact that CLM added a new classroom in Winter 2012 and the initial Fall 2012 reservations CLM expects the reserved hours will increase in future years.

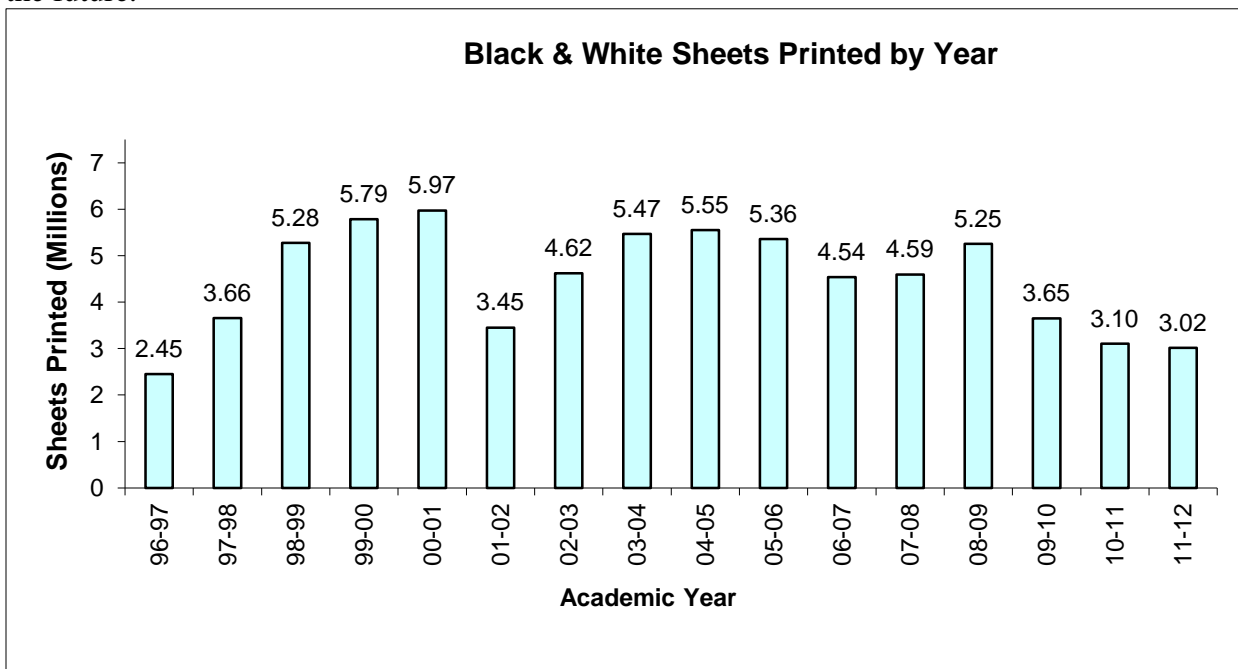


The total number of logins has dropped since 08-09, most likely due to the combination of the increased printing rate and fewer open hours. However, the number of logins appears to no longer be trending downward and may have flattened out.

The number of unique clients has remained relatively constant since 08-09.



The number of black & white sheets printed per year dropped dramatically from 08-09 due to the printing rate increase in Fall 2009. However, the sheets printed have appears to level out in recent quarters. We expected that sheets printed would drop significantly initially but then slowly increase as students become accustomed to the new rate. It remains to be seen if the printing levels will increase in the future.



The number of color pages printed per year has steadily increased over the past few years. CLM increased the number of rooms with color printers in Summer 2008 which led to the large jump that year.

**Color Pages Printed by Year**

