Spring 2018 Quarterly Report
Includes Review of 17-18 Annual Data
Computer Lab Management
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Computer Lab Management (CLM) operates 21 computer rooms across the UC Davis campus. These consist of 14 computer classrooms and 7 open access labs with a total of 644 installed stations. CLM also manages nine departmental computer rooms with 233 installed stations for the School of Education, the UC Davis Language Center, and The Arts Admin Group.

Some of the significant items from Spring 2018 include:

- The number of class hours increased from Spring 2017 (6078.5) to Spring 2018 (6295.5). This was the highest value for a Spring quarter in CLM history and part of the overall trend of increasing classroom reservations. There was much higher classrooms utilization 7-10pm than in past quarters.
- The computer classrooms were reserved for 20,753 hours in 17-18, which is close to the average of 20,867 over the past four years. The annual data shows there was a large increase of scheduled class hours when we added more computer classrooms. But now we appear to be filled to mostly to capacity (about 43 hours per week per classroom).
- The demand for computer classrooms is increasing as enrollment increases and faculty members continue to adopt and integrate more computer based educational technology into their classroom teaching.   CLM cannot accommodate all the demand in our classrooms.   Therefore, CLM is continuing to look for ways to add computer classrooms.
- Over the past few years the open-access utilization and waitlines have been decreasing. There is a long term trend of decreasing drop-in use. However, classroom demand remains very high. Therefore, CLM will analyze our spaces to determine if any open-access lab can be converted into a computer classroom.
- CLM prepared for Summer 2018 upgrades by purchasing hardware and software, implementing and testing software configurations, and developing a summer project plan. The major upgrade this summer is upgrading all the PCs to Windows 10.
- CLM conducted a faculty survey about computer room use. The results are posted at https://computerrooms.ucdavis.edu/pubs/survey/faculty_s18.html.

Spring 2018 Statistical Summary

Utilization

Overall computer room utilization

Computer Lab Management operates 21 computer rooms at UC Davis. The graph below shows average Monday through Thursday utilization for classrooms, open-access labs and all rooms.
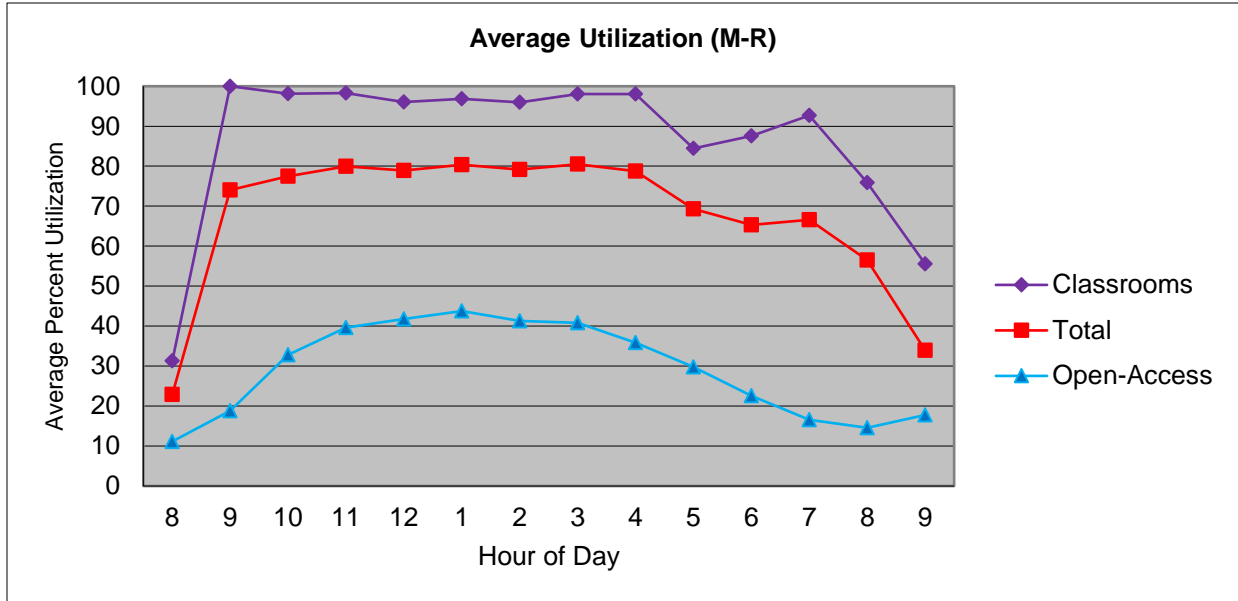
The general trend of high usage from 9am to 5pm continued during Spring 2018. Classroom use is very high – averaging 95% from 9am to 8pm. In recent years classroom utilization 6-10pm has significantly increased due to increasing class demand. Open-access utilization is substantially lower.

Class Use

During Spring 2018 there were 6,295.5 class hours reserved in the computer classrooms. This is the highest amount for a Spring quarter in CLM history.
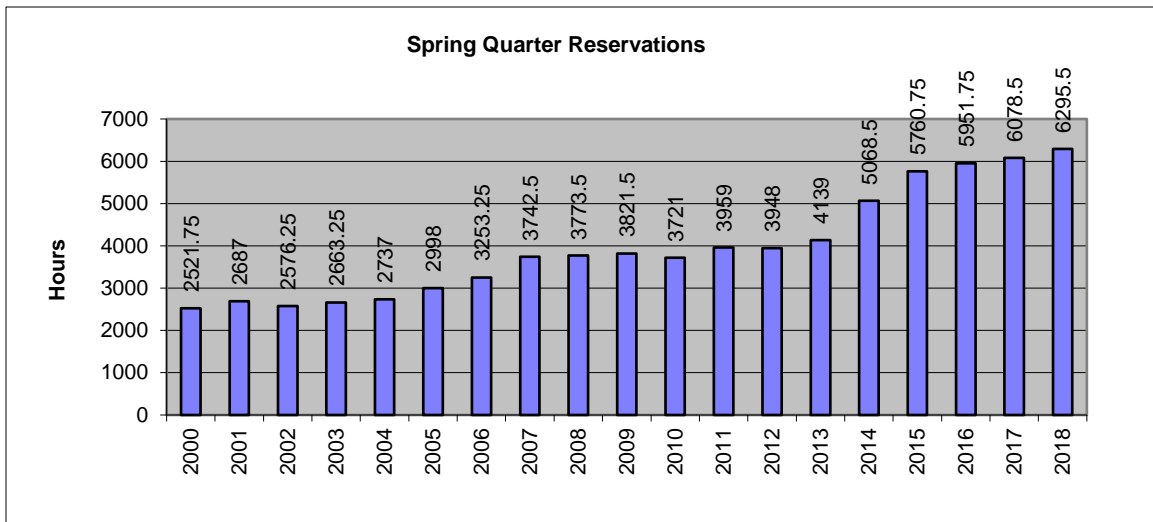
In addition, there were 277 class software installs and 165 class folders created during Spring 2018.

Number of Logins and Users

The total logins in Spring 2018 were 210,038, essentially the same as Winter 2018.

Total logins per quarter
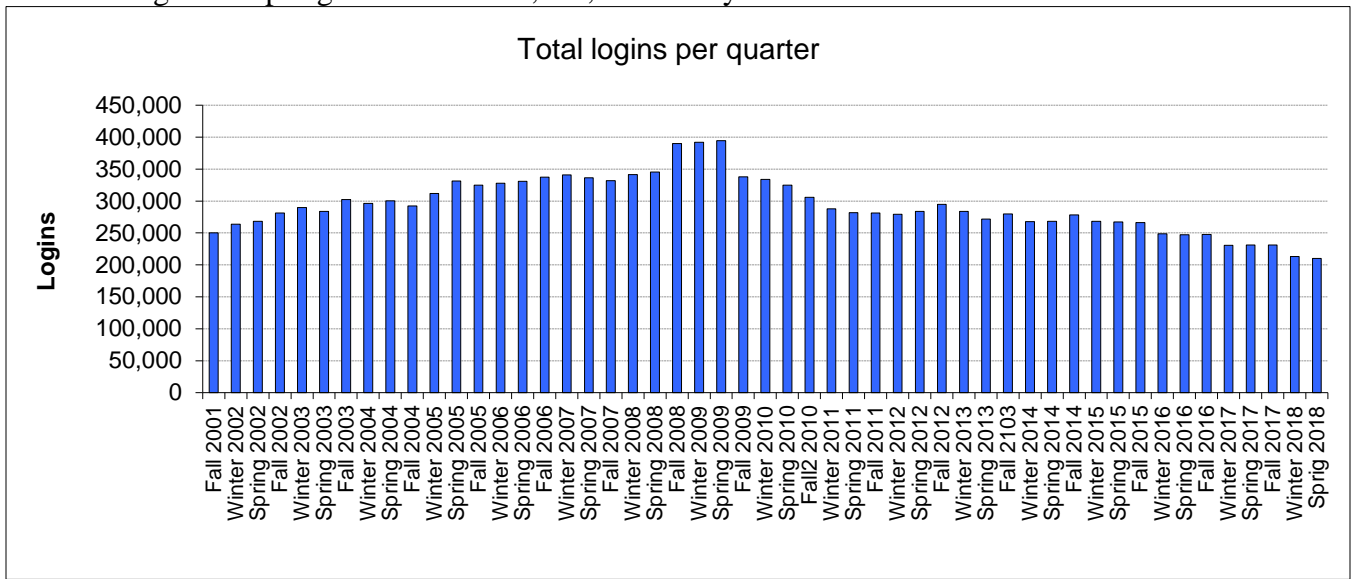
Unique Users

The number of unique clients decreased to 19,703 in Spring 2018. Of these, 19,193 were students. This was a decrease of 640 clients from Winter 2018. The decrease is normal as the total number of students at UC Davis typically drops from Fall to Spring quarter.

Number of Unique Clients per Quarter
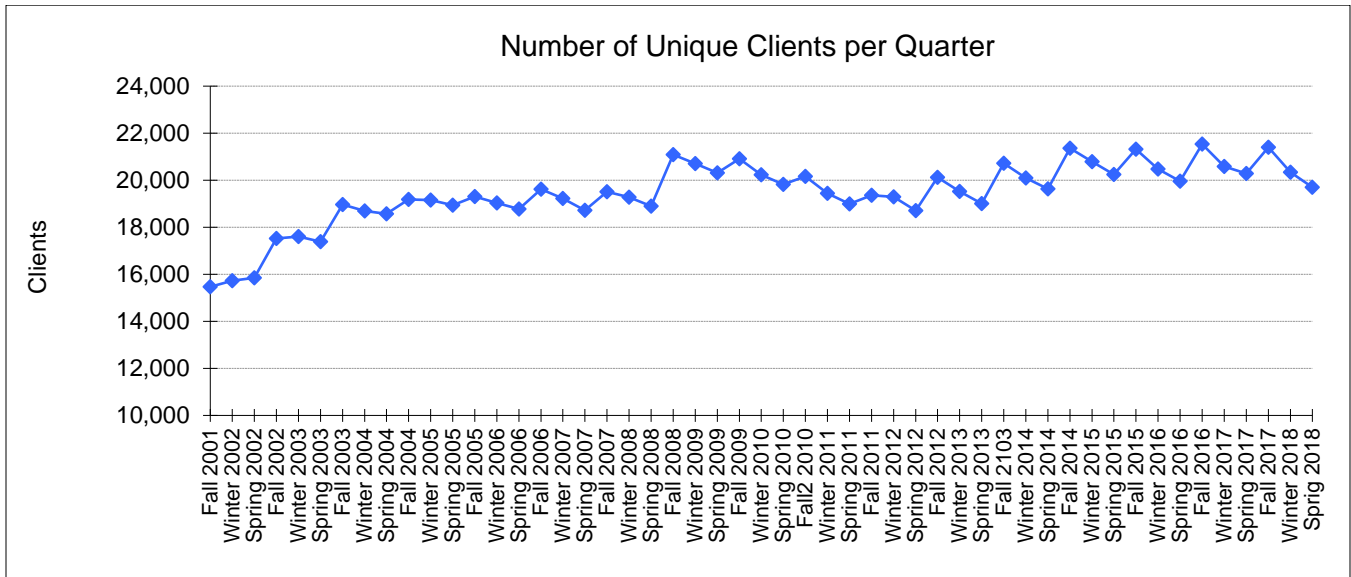
Virtual Lab Users

The IET Virtual Lab was used 7,409 times by 1,224 unique clients. Spring quarters typically have higher use than other quarters, so we assume the classes during Spring quarter must make heavier use of specialized software.

Virtual Lab Usage
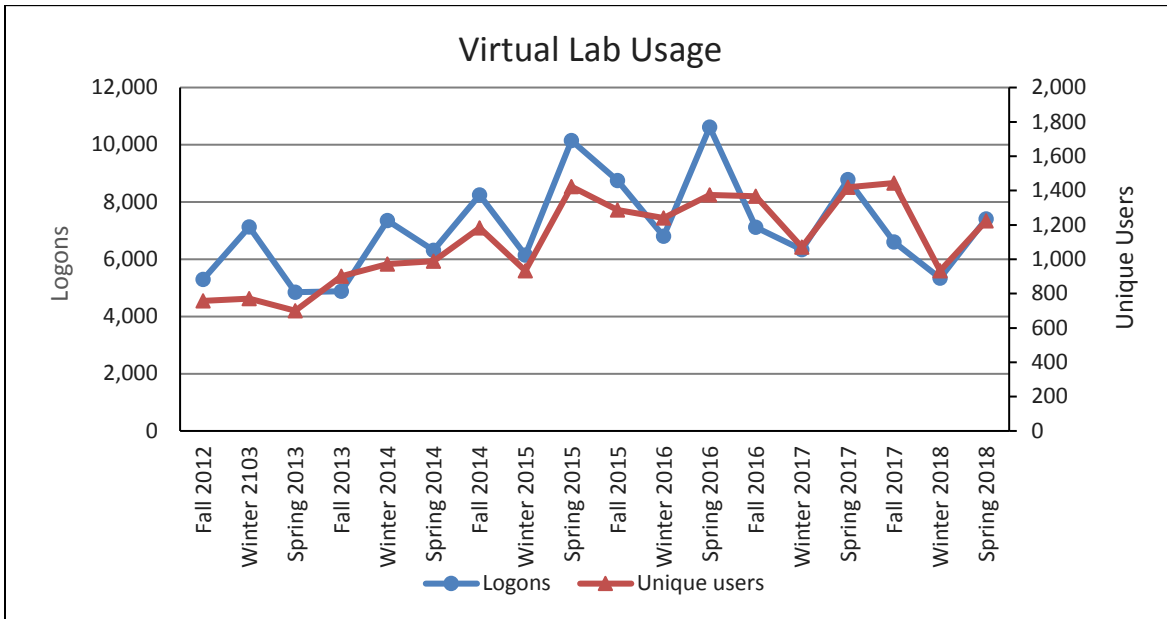
There were 826 denied connections to the virtual lab since there were no free stations. Most denied connections were during the day when there are only a very limited number for computers available.

Printing

The total sheets printed in Spring 2018 decreased to 643,217 (a decrease of 4.1%). The average sheets printed per client (of those who printed) was 38.37. The large decrease from 08-09 was due to the change in printing rates at the start of Fall 2009.

Black & White Sheets Printed per Quarter
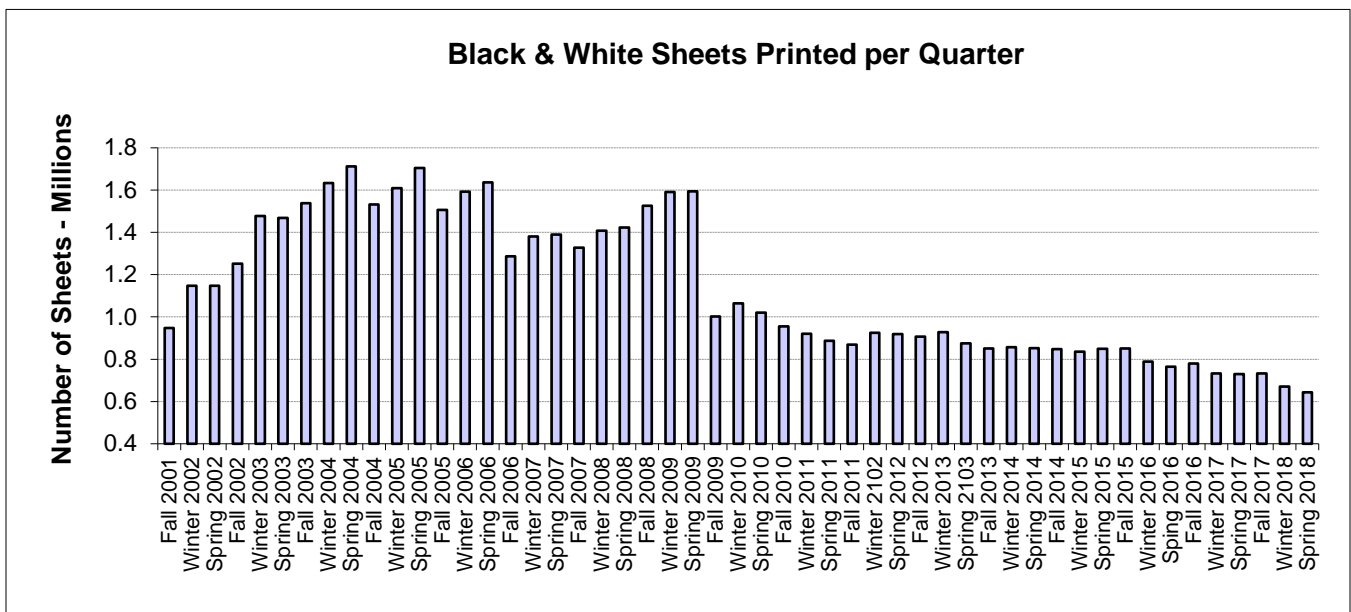
There were 13,770 color pages printed, an increase of 2.5% from Winter 2018.

Color Pages Printed
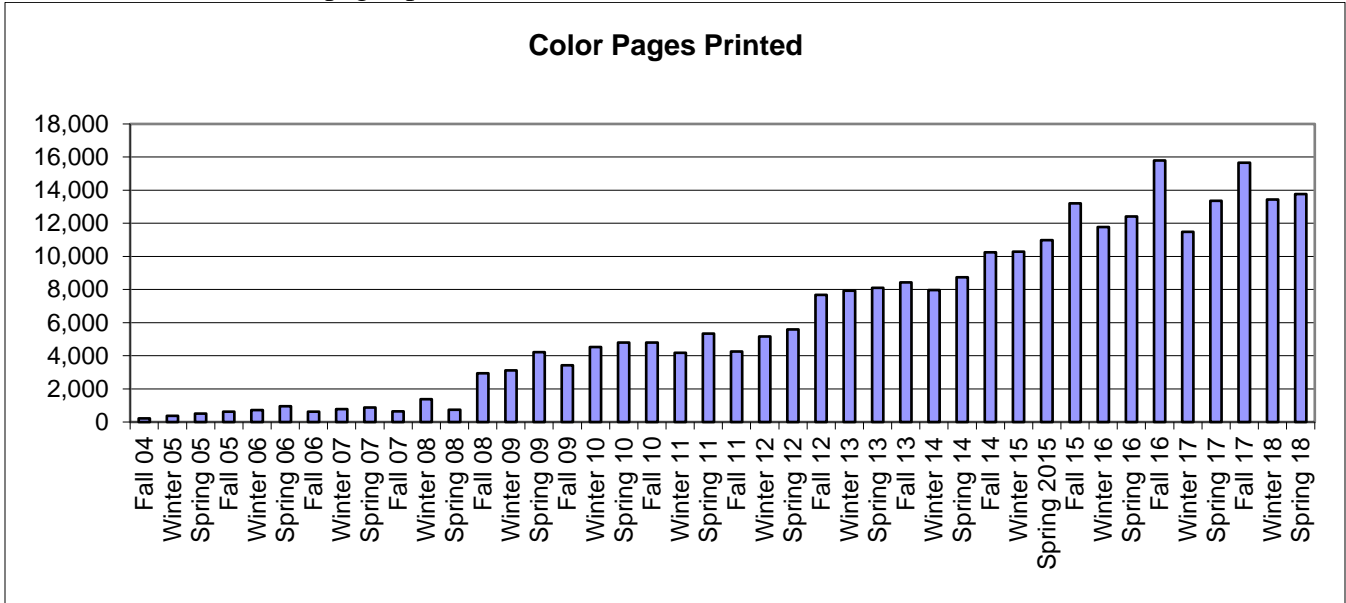
There were 4,737 wireless print jobs, a decrease of 604 from Winter 2018. There were 597 unique clients who printed though the wireless printing system. The drop in wireless printing usage from the 08-09 level is most likely due in part to the overall drop in printing caused by the printing rate increase.

Wireless Print Jobs
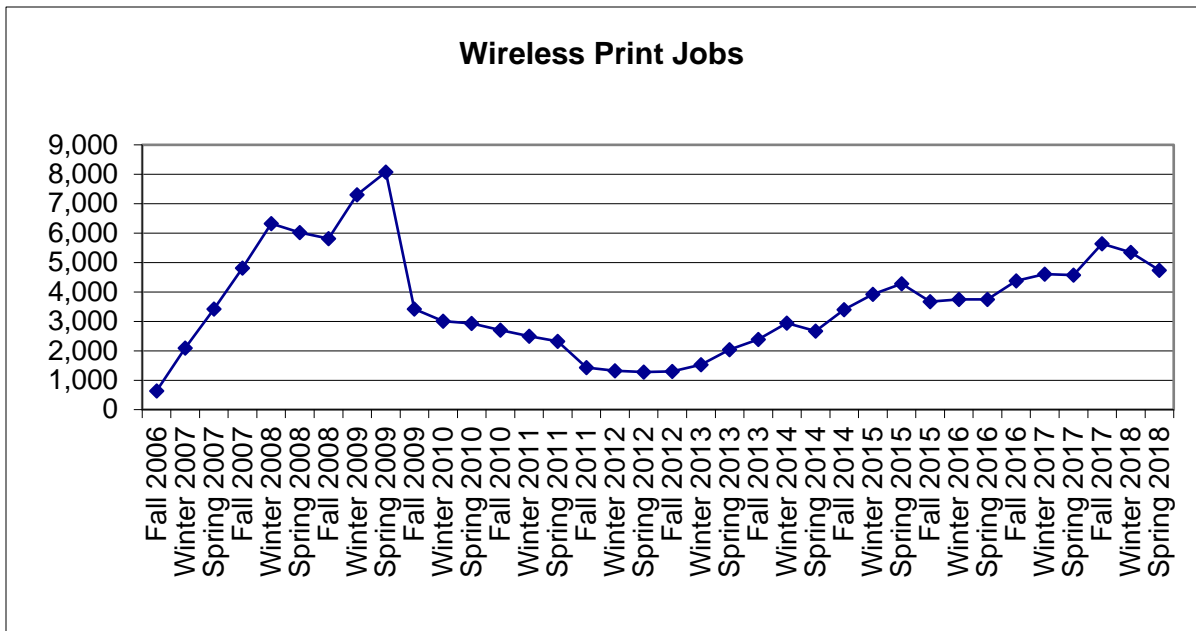
Review of Annual Data

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

The overall computer classroom reserved hours dropped slightly to 20,753 in 17-18, a decrease of 2%. There was substantial growth until 14-15, but the total has been roughly constant after that year.

Computer Classroom Reservation Trends
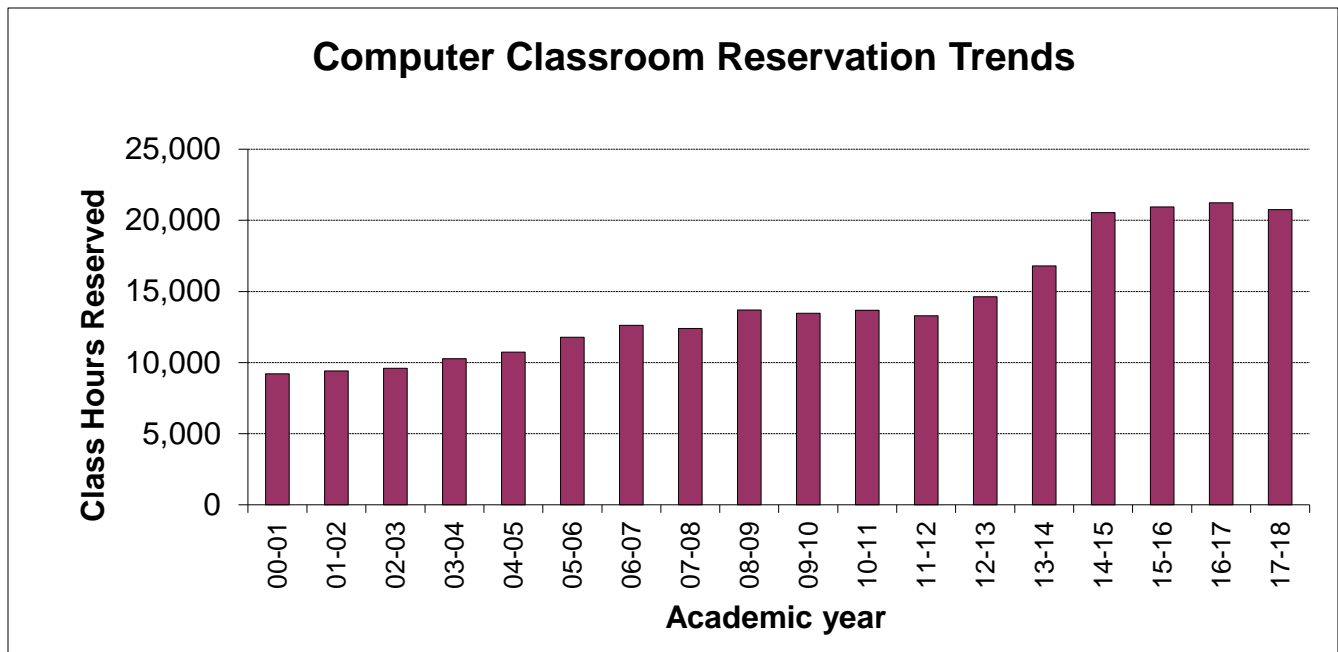
The growth was partially due to the addition of 3 new classrooms in the SCC and Shields Library since 2012. However, the average number of class hours has also increased significantly to 43.5 hours per week over the past few years. The need for classrooms has grown so much that faculty and departments are willing to schedule classes at the less desirable times (evenings & Friday afternoon) which were avoided previously.

Class Hours per Week
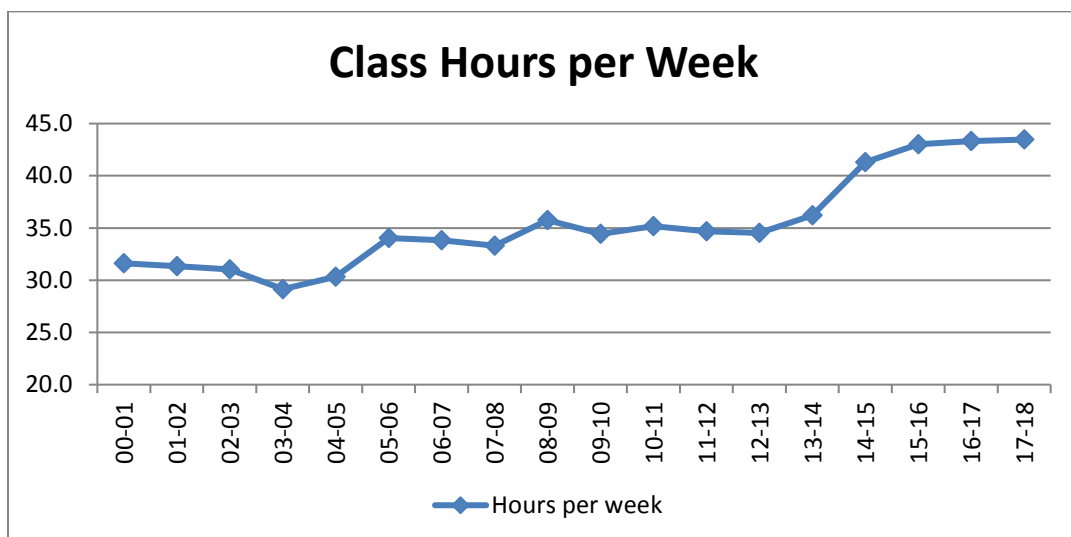
The total number of logins decreased by 8.4% from 16-17 to 17-18 and the number of unique clients decrease by 0.9%.
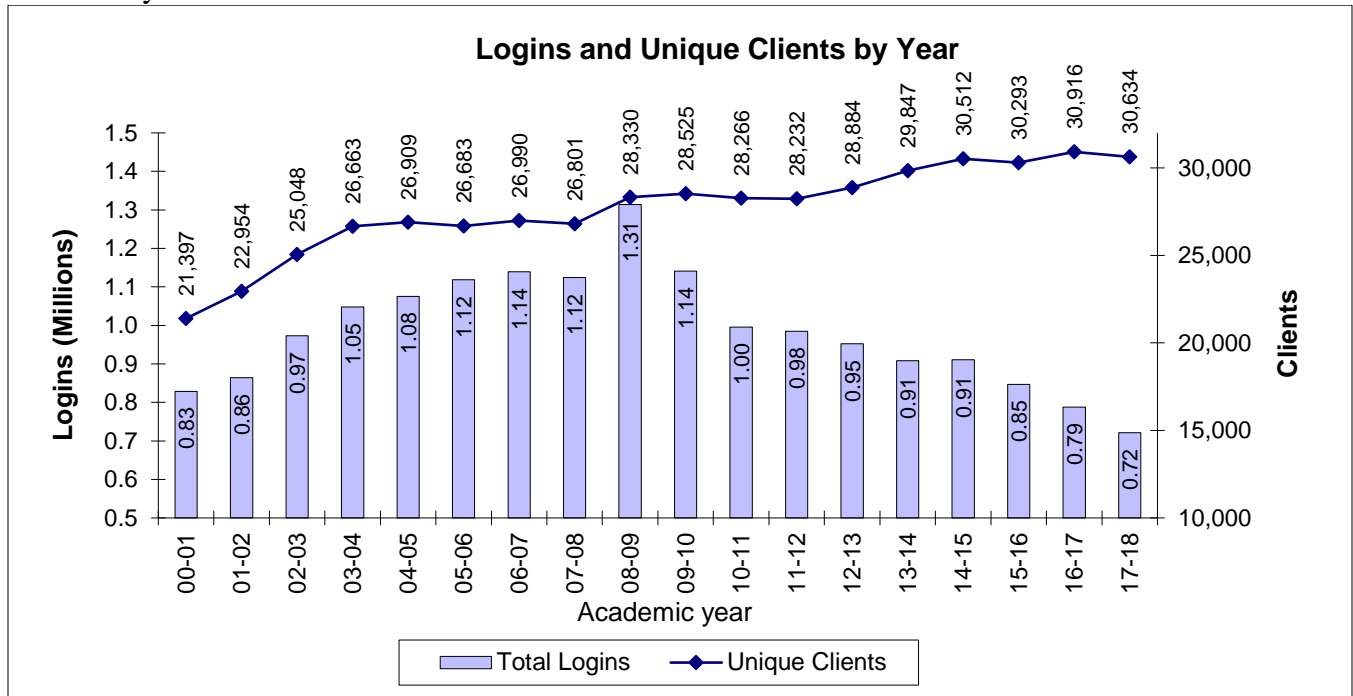
The decrease in number of logins from 08-09 has several likely causes:
- The Fall 2009 printing rate change decreased printing demand and therefore logins.
- Increased ownership of laptops and smartphones reducing student need for accessing the computer rooms.
- Decrease of open hours – CLM dramatically cut evening and weekend available hours in response to budget issues.

The number of black & white sheets printed decreased by 8.6% to 2,247,462 sheets in 17-18. The sheets printed per year dropped dramatically after 08-09 due to the printing rate increase in Fall 2009. In recent years the number of sheets printed is slowly trending down.

Black & White Sheets Printed by Year

Academic Year	Sheets Printed (Millions)
00-01	5.97
01-02	3.45
02-03	4.62
03-04	5.47
04-05	5.55
05-06	5.36
06-07	4.54
07-08	4.59
08-09	5.25
09-10	3.65
10-11	3.10
11-12	3.02
12-13	3.01
13-14	2.81
14-15	2.80
15-16	2.64
16-17	2.46
17-18	2.25
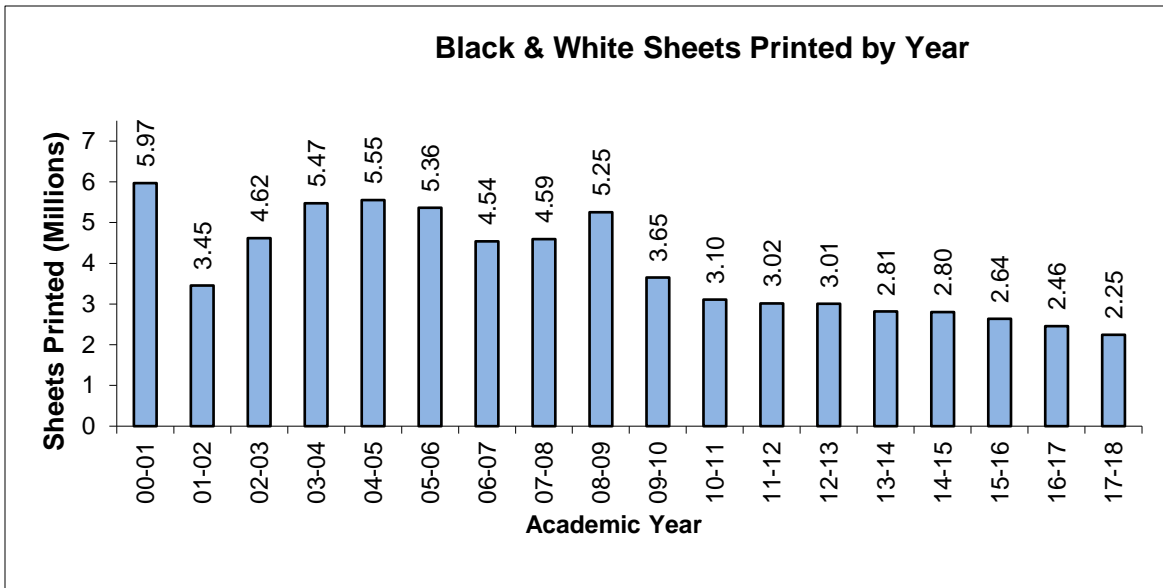
The number of color pages printed per year has grown dramatically over time.

Color Pages Printed by Year

Academic Year	Color Pages Printed
04-05	1,089
05-06	2,636
06-07	2,481
07-08	2,794
08-09	11,224
09-10	14,183
10-11	15,673
11-12	16,865
12-13	25,635
13-14	27,540
14-15	33,899
15-16	39,830
16-17	43,365
17-18	46,133