

University of Saskatchewan Learning Commons
Phase I Evaluation

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Executive Summary

Phase I of the UofS Learning Commons was a collaborative development between the Library and the Information Technology Services Division. The Learning Commons has been open since October 9, 2001.

The Learning Commons offers a different model of service delivery than other student computing facilities on campus. It combines desktop computing with access to a library reference staff, a reference collection, and an increasing selection of online information resources to support student research. Over time the intent is to develop the Learning Commons computers into true "scholar's workstations".

The Learning Commons has been a huge success from the perspective of demonstrated student demand. Between October 9, 2001 and February 4, 2002 there were 24,679 individual login sessions. 2,502 different students have used the 20 seat facility since opening day. This is approximately 13% of total UofS enrollment!

Despite minimal advertising, the Learning Commons "occupancy rate" has been rising steadily. Often at peak times there are no seats available. During the month of November, 2001 the average occupancy rate between 2:00 – 3:00 p.m. was 80.2% (including weekends). On individual days the occupancy rate was as high as 98.2% during this time slot.

Use of the Learning Commons is widely distributed. Students from 12 different colleges have used the LC. More than two thirds of the use is by students from the Colleges of Arts & Science, Commerce, and Engineering. 10% of the use comes from unclassified students.

It is recommended that the Library and ITS Division seek funding for a 50 seat expansion to the Learning Commons in 2002/2003, with appropriate increases for staffing and technical support.

Below is a cost estimate showing one-time expenses and annual operating costs for Phase II of the Learning Commons, based on 30 new stations (furniture, hardware, and wiring), plus replacement of 20 4-year old Main Library public access computers by new LC workstations (hardware only). Some of the new Learning Commons stations will be installed in the branch libraries.

Fixed Costs	\$152,500.00
Annual Operating Costs	\$ 42,050.00
Total Cost Year One	\$194,550.00

The Library and ITS will need to seek incremental funding for the operation of Phase II of the Learning Commons.

The U of S Learning Commons

Phase I of the UofS Learning Commons is a collaborative development of the Library and the Information Technology Services Division, demonstrating the joint commitment of these two Departments to improving the student learning environment at the University of Saskatchewan. The Learning Commons is available to all students in all programs, free of charge. Faculty and staff may also use the Learning Commons.

Phase I of the Learning Commons consists of 20 state-of-the-art computer workstations providing access to the Library Catalogue and other research databases, a full set of office productivity software applications, web based e-mail, network file storage, plus color laser printing and scanning. The Learning Commons also features a wireless network for student owned laptop computers.

The Learning Commons has been open since October 9, 2001. It is available for use seven days a week, whenever the Main Library is open (89 hours per week). Library reference staff are available to help students in the Learning Commons 63 hours per week. Technical support is available from the Library IT staff, and by telephone from the ITS Help Desk.

Planning the Learning Commons

In April, 2001 a task force composed of members from ITS and the Library was formed to plan the implementation of the Learning Commons. The members of the task force were: Cameron Alexson, David Fox, Darryl Friesen, Linda Fritz, Keith Jeffrey, Diana Kichuk, Doug MacDonald, Anne Marie Moulin, Alison Nussbaumer, Ed Pokraka, and Gail Rothery. Other staff who made a significant contribution to the implementation of the Learning Commons were: Roma Kail, Jamie Fast, Glenda Forward, Rory Owens, and Myron Wegner.

Phase I of the Learning Commons was developed at a cost of approx. \$85,000 (including electrical and computer wiring, furniture, computer hardware and software). There was no new funding allocated for this project. The cost was shared by ITS and the Library operating budgets.

Two additional phases of Learning Commons development have been tentatively mapped out. For 2002/2003 it is hoped to add 50 additional stations to the Commons, and to increase staffing proportionately. Proposals have been developed to solicit funding for Phase II from TEL and/or the 2002/2003 capital allocation. Phase III would increase the capacity of the Learning Commons significantly, and add additional training lab facilities, and small group study rooms for student use. Phase III would likely require a relocation of the Learning Commons and major building renovations.

Setup and Training

One member of the University ITS Division and six members of the Library ITS staff were directly involved in the setup of the Learning Commons:

Cam Alexson – Preparation of hardware quotes, ordering of hardware, staff training.

Doug MacDonald – preparation and revision of software image including user authentication; troubleshooting print station problems; programming of the LC statistics generator

Darryl Friesen – design and content of LC Web pages

Jamie Fast – Setup of colour print station; documentation of printing procedure; training Reference and Access Services staff in operation of the print stations, zip drives, and scanner; general troubleshooting

Glenda Forward – inventory of LC hardware

Rory Owens, Myron Wegner - installation of software image; installation and removal of 7 stations in Room 161 for training sessions; installation of hardware, headsets in Learning Commons; configuring, installing and re-installing instructor station for Room 161

In addition considerable time was put in by David Fox, Gail Rothery, Linda Fritz, Roma Kail, Anne Marie Moulin, and Diana Kichuk on various aspects of the planning and implementation of the Learning Commons.

The cost to set up the Learning Commons - in terms of the fraction of Cam's, Doug's Darryl's, Jamie's, Rory's and Myron's time devoted to the project in August and September - was approximately \$9,750:

Cam – 1 week

Doug - 4 weeks

Darryl - 1 week

Jamie - 1 week

Rory & Myron - 1 week

Resources

The Learning Commons provides access to web based e-mail, network file and web page storage, color laser printing and scanning, links to the Library and ITS home pages, links to other campus information services, and the following software and database applications:

- Beilstein 2000 (database of chemical structures, reactions, and references to chemical literature)
- Beyond 20/20
- Canadian Encyclopedia (requires CD-ROM disc)
- Dictionary of Canadian Biography (requires CD-ROM disc)
- HP PrecisionScan Pro (scanning) - only available on the scanning workstation
- Merck Index (requires CD-ROM disc)
- Microsoft Excel 2000 (spreadsheet)
- Microsoft Internet Explorer 5.5sp2 (web browser)
- Microsoft Office Interactive Training
- Microsoft PowerPoint 2000 (presentation)
- Microsoft Word 2000 (word-processing)
- Netscape Navigator (web browser)
- Netscape Composer (web page development)
- PaintShop Pro 7.0 (graphics) - only available on the scanning workstation
- QVT-Term (terminal emulation)

- SciFinder Scholar 2000
- SciFinder Scholar 2001
- SPSS for Windows (statistical analysis)

User Training

ITS offers numerous courses (See: <http://www.usask.ca/its/courses/index.html>) in the use of office productivity software, web development, etc, in the Library training lab (Room 161). It is suggested that some or all of these courses, as well as the Library's general user education and information literacy programs, could be promoted as Learning Commons offerings.

Staff Training

Reference staff have indicated a desire to have at least introductory training on all software loaded onto the Learning Commons stations. A special orientation session on SPSS was offered for the Learning Commons staff on January 23rd and 24th.

Learning Commons Management

A two-tiered management structure has evolved consisting of a Steering Committee and an Operations Team. The Steering Committee is responsible for planning and policy. The membership consists of Cameron Alexson, David Fox, Linda Fritz, Keith Jeffrey, and Ed Pokraka. The Operations Team has been meeting on a weekly basis to resolve operational issues. The members of the Operations Team are: Cameron Alexson, David Fox, Linda Fritz, and Roma Kail.

Student Response (If you build it, they will come.)

Students have responded extremely positively to the Learning Commons. Between October 9, 2001 and February 4, 2002 there were 24,679 individual login sessions. 2,502 different students have used the facility since opening day. This is approximately 13% of total UofS enrollment!

Despite minimal advertising, the Learning Commons "occupancy rate" has been rising steadily. At peak times there are few seats available. During the month of November, 2001 the average occupancy rate between 2:00 – 3:00 p.m. was 80.2% (including weekends). On individual days the occupancy rate was as high as 98.2% during this time slot.

Who is using the Learning Commons?

The following table shows an analysis of unique logins for the period Oct 9, 2001 – Feb 4, 2002.

College	Unique Logins	% Usage (of total minutes in use)
Non-student	103	2.09
Agriculture	167	5.48
Arts & Science	1007	49.32
Commerce	462	10.34
Dentistry	2	0.26
Education	56	0.73
Engineering	180	8.50
Grad Studies	134	6.37
Law	13	0.81
Medicine	8	0.15
Nursing	5	0.13
Kinesiology	70	3.32
Pharm & Nutr	88	1.34
Phys Therapy	2	0.01
School of Ag	2	0.17
Unclassified	203	10.98
TOTAL	2502	100.01

Clearly, the Learning Commons is attracting students from all across campus. The large number of unclassified students was probably predictable. What is surprising is that more than two thirds of the use is by students from Arts & Science, Commerce and Engineering, all of whose colleges have well established computer labs of their own. In fact computer lab membership is compulsory for students in the colleges of Commerce and Engineering.

What are Students doing in the Learning Commons?

Software Applications

The overall average session length in the Learning Commons has been 36 minutes. There have been several days on which average session length exceeded 50 minutes. Average session length for 134 graduate students was 53 minutes. By contrast, the average length of time a student spends at an OPAC station is estimated to be 15-20 minutes.

Tracking of software applications was only implemented on November 1, 2001. Since that date the use of Microsoft Office and other software applications has constituted 19.6% of total Commons logins.

October 9, 2001 through February 4, 2002

Total Logins	Word	Excel	PowerPoint	Netscape	Internet Explorer	Paint Shop Pro ¹	HP ScanJet ¹	SPSS ²	Bellstein ²	Scifinder Scholar ²
24679	3502	438	504	12968	24679	36	72	147	129	7

Website Access

A log of Website access from the Learning Commons stations was begun on January 2, 2002. All Web pages accessed from the LC stations were counted in 4 broad categories:

Library-related sites

Sundog, Moondog, Datalib, Lib74123 (proxy server), plus 36 remote database and ejournal vendor sites

Other UofS sites

All other servers in the "usask.ca" domain

Popular sites

hotmail.msn.com, hotmail.passport.com, msn.com, msn.ca, yahoo.com, amazon.com, ebay.com, google.com, altavista.com, excite.com

All other sites

	Jan 2-5	Jan 6-12	Jan 13-19	Jan 20-26	Jan 27 – Feb 2
Total pages displayed	94,409	295,192	321,663	328,366	278,542
% Library-related sites	2.1	3.0	4.8	5.9	5.0
% Other UofS sites	34.1	26.1	25.6	25.7	27.1
% Popular sites	17.9	19.5	18.7	18.5	17.2
% All other sites	45.9	51.3	50.9	49.9	50.6
TOTAL	100.0	99.9	100.0	100.0	99.9
% email	14.6	13.3	12.8	12.3	12.8

Reference Service and the Learning Commons

It is not possible with our present methods of keeping statistics to separate Learning Commons (technical) questions from reference questions. Students using the Commons will often ask questions that could be either. Indeed, students using OPAC stations can and do ask the same types of technical questions as those who use the Learning Commons. The University of Calgary changed their statistical categories to fit their Information Commons queries. They use "directional", "reference" and "technological".

¹ software implemented Nov 22, 2001

² software implemented Jan 2, 2002

Darlene Warren of the University of Calgary stated that the number of questions rose dramatically when the Information Commons opened. In the second year of operations, they hit a plateau, but that plateau was higher than before the Information Commons opened. This year, questions are on the rise again. It is not yet possible for us to tell if there is an increase in the number of questions asked at the reference desk. The October 2001 statistics were gathered before the Learning Commons opened. November 2001 showed a decrease in the number of questions as compared to November 2000; however, the number of instructional questions went up from 592 to 1102. Unfortunately, two days were missed in the week statistics were compiled in November 2001, so it is difficult to make a real comparison. December 2001 statistics were up over December 2000 overall and in the reference and instructional categories.

Darlene also said that she believes the Commons was instrumental in bringing undergraduates back to the Library. Staff members here at the U of S noted that there were more students in the Main Library than there were in the recent past; however, this cannot be related to the opening of the Learning Commons. There is some speculation as to whether students feel that the Library is a safe place to be. Nevertheless, all staff feel the energy that the students bring to the library.

Does the Learning Commons contribute to the information literacy goals of the Library? Information literacy is defined as follows: "To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information. Ultimately, information literate people are those who have learned how to learn." (American Library Association, 1989) Students are showing that they know they need information because they are approaching desk staff for assistance, whether it's to find a physical or electronic product, and they are taught how to locate resources. They are definitely using the information in essays and presentations that they prepare in the Learning Commons environment.

The use of casual library assistant IVs on the desk has been a successful experiment. Librarians have commented that the casuals refer more questions than regular staff members. The casuals bring an up-to-date knowledge of what's going on in the classroom as well as an interest and growing expertise in subject areas that complement that of full-time library staff.

Evolution of Student Use

The Learning Commons (LC) has maintained a high occupancy rate from its opening day. We have no reference desk statistics to illustrate the nature of work done at these stations. The Learning Commons FAQ reports, however, illustrate the change in types of questions asked from these terminals. The FAQ reports are compiled from a narrative log of repeated and unique questions asked about LC functions.

There is a definite shift from inquiries about log on and printing procedures to detailed questions about software applications (Word, Excel, PowerPoint), evidence that students are using the applications to produce their class assignments. Currently, however, another shift is starting to occur - more students at these stations are asking how to read citations in electronic journal indexes, primarily WebSpirs. Increasingly, we are finding

that students are using these terminals as freely as they use the OPACS. More students are learning that they can use the OPAC functions and software applications simultaneously.

Use of Software / Technology

The range of software and technology questions we receive is illustrated below:

- Which program do I use to type my essay?
- How do I plot the product of these two variables?
- How do I change the spacing in this document?
- How do I scan this image and e-mail it to my friend?
- Can I save this .pdf file as a Word document so that I can edit it?

Use of Library Resources & Services

Additional indications of students using library resources from these terminals include increases in the following:

- The number of students frustrated at not being able to run library owned cd-roms at the terminals. As a result, we will be pre-installing the set-up files for several products such as the *Oxford English Dictionary*, the *Merck Index*, and the *Atlas of British Columbia*.
- The number of Commerce students, at these stations, requiring reference desk assistance with their library research assignments.

Use of Unique Features

- Students are starting to ask how to save to their V drive, illustrating an increased awareness about their personal hard drive storage space. These questions present the opportunity to tell them about the unique file-based management utility allowing remote access to their V drive.

Other Uses

- We receive numerous questions about accessing my.usask.ca accounts from the LC stations. Students need to be told to open these accounts in Netscape in order to view, save or print their class notes, assignments, and quizzes.

Conclusion

The sample questions outlined above indicate that students are starting to use the LC stations for more than personal e-mail or Internet searches. They are becoming aware of what the stations provide and how easy they are to use; many are less intimidated by the "black machines over there". From a reference services perspective, the sooner that all terminals in the library are LC stations, the sooner our patrons' confusion, frustration, and inconvenience can be lessened.

Our Library Assistants IV, hired specifically to answer Learning Commons questions, are all graduate students. All 3 prefer to use the LC stations for their research and writing as opposed to the labs. They cite the lighting, convenient access to library resources, and even the scanner as additional reasons for their preference.

The students who ask questions about library resources from the LC are those with a certain amount of comfort and awareness with these machines. As these factors increase, we will see more integrated use of the software and library resources at the LC stations. Students from these stations are starting to ask us for a dictionary or the current serials reading room, for example.

Regulars at the LC stations wonder why we have mere OPACs. Similarly, prior to the Learning Commons we encountered many surprised faces when we told patrons there was no word processing software available on the OPACs, especially when we have a printer. Formerly, they could not print or save their *my.usask.ca* class notes or power point lectures very easily from the library.

User Feedback

Due to an oversight the Learning Commons email "Comments" form was not turned on until December 11, 2001. Since that point only one question has been received through the form. It was from a student who mistakenly thought he was communicating with his instructor. The query was re-directed to the proper individual.

How Does the Learning Commons Differ from Other Student Computing Facilities on Campus?

1) The Learning Commons has wireless access.

2) It is in a library. It combines access to desktop computing with access to a library reference staff and a reference collection. Some of the students who were interviewed for the videotape made for the LC opening commented on the value of that combination of resources and services.

3) It is free (or at least there is no direct cost to students). The Learning Commons has been attracting students who cannot afford, or cannot justify, the cost of a computer lab account. As such it is providing a valuable service. This may be a temporary advantage when the University moves to eliminate computer lab fees. Even after general access computer facilities become "free" to all students, it is likely that many of them will continue to use the Learning Commons as their facility of choice. One student in the LC video commented that she had to come to the Library anyway, so it was convenient to have access to computing resources here. It is clear from questions asked by students using the Learning Commons that many of them have accounts in other labs but use the LC stations in addition to, or in preference to, their home computer lab.

At present many students are tied to college labs by the fact that they have paid a computer fee and want to get their money's worth. Some students are forced to belong to the Arts Lab in order to retrieve course materials and assignments via *my.usask.ca*. In effect, the Arts Labs have created a captive market. However, some college labs are cramped and crowded. It is possible that when computer lab fees are removed and students can enjoy unrestricted access to any general computing facility on campus, that more of them will choose the Learning Commons because it is more spacious and attractive and because expert assistance is available nearby. It is entirely possible that

the elimination of computer lab fees will **increase** demand for spaces in the Learning Commons.

4) We are creating the "scholar's workstation". The LC stations host learning resources unavailable in other general student computing facilities because they require special client software:

- Beilstein 2000
- Beyond 20/20
- Canadian Encyclopedia
- Dictionary of Canadian Biography
- The Merck Index
- SciFinder Scholar 2001
- SciFinder Scholar 2000

This is just the beginning. As time and resources permit, many additional research tools, unique to the Learning Commons, will be added, including:

- Endnote
- ProCite
- Oxford English Dictionary (OED)
- COPPUL Research Assistant

5) It is just the first step of a larger long-term vision for integration of learning facilities and services described in the discussion paper "University of Saskatchewan Information Commons: Reconfiguring the Learning Environment".

Competitive Advantage

The competitive advantage of the Learning Commons includes:

- 1) Location, Location, Location!! The Main Library is a natural hub of student traffic. Students have to come here anyway to research their assignments
 - 1) the attractiveness of the space
 - 2) state of the art hardware
 - 3) adjacent to reference staff and reference collection
 - 4) scholar's workstation

Conclusions

The Learning Commons has been a huge success from the perspective of demonstrated student demand. It has met the objectives of the ITS Division to expand access to student computing. It is more difficult to assess whether it has met Library expectations. The figures on utilization of Library applications in the Learning Commons are very low. However, these numbers are based on data collected during January, 2002 - not a peak period for library activity. There is no comparative data on the utilization of library applications from the OPAC machines. More investigation is necessary.

All UofS students now have access to network file storage on Folder and Homepage, and should rightly expect to be able to download results of library database and Internet searches to their network drive space. Floppy disks are not large enough for some of

these files. "Dumb" OPAC stations will soon no longer good enough. Students need to have fully functional workstations in the Library where they can do integrated work. Fully functional workstations are available in the college computer labs. What the Learning Commons offers is the added value of expert human guidance along with the computing facility. However, if the Library does not begin to replace its OPAC machines with an adequate number of fully functional workstations, fewer students will come to the Library.

Phase II Recommendation and Cost Estimate

It is recommended that the Library and ITS Division seek funding for a 50 seat expansion in 2002/2003, with appropriate increases for staffing and technical support.

Below is a cost estimate showing one-time expenses and annual operating costs for Phase II, based on 30 new stations (furniture, hardware, and wiring), plus replacement of 20 4-year old Main Library public access computers by new Learning Commons workstations (hardware only).

Fixed Costs	\$152,500.00
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