Convergence between interlibrary loan and acquisitions: a science and engineering library experience

Louis Houle

McGill University


This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact epubs@purdue.edu for additional information.
Convergence Between Interlibrary Loan And Acquisitions: A Science And Engineering Library Experience.

Louis Houle
McGill University

Abstract:
Libraries are looking at new types of services to improve the dissemination of information to their users. One such new service, the integration of Interlibrary Loan with acquisitions and collection development, looks like a promising approach to meet the users' information needs. The requests that meet selection criteria are not sent through the regular ILL borrowing channels but are instead turned into rush acquisitions. A special fund was set aside to purchase books requested by users (students, faculty and staff) through ILL processes. The ILL Librarian does both the selection of the ILL requests and the ordering of the books. The books are ordered through WEB sources (such as Amazon.com, Barnes&Noble.com, etc.) and purchased with a credit card. Books are received in ILL and rush processed prior to user delivery. This service has been in place for more than two years now. Results on the turnaround time, the circulation of books, the average cost per title and the effectiveness of this service are presented here.

Introduction
The Schulich Library of Science and Engineering, located on the downtown campus of McGill University, serves twelve departments from the Faculty of Engineering and the Faculty of Science: Atmospheric and Oceanic Sciences, Chemical Engineering, Chemistry, Civil Engineering and Applied Mechanics, Computer Science, Earth and Planetary Sciences, Electrical and Computer Engineering, Geography (physical), Mathematics and Statistics, Mechanical Engineering, Mining Metals and Materials Engineering, Physics. These departments represented a total of 1,704 users in 2002/03: 281 faculty, 89 post doctorates, 103 PhD, 398 masters and 833 undergraduates.

As of June 1 1998, the central ILL office took over the ILL operations from the Schulich Library. Ever since that time the central ILL office took over many other ILL operations and it is now handling all disciplines except medicine and dentistry. This centralization process increased the ILL activity and workload.

In the winter of 2001 the Head of the Schulich Library and the ILL Librarian asked themselves if it might be more beneficial for the users to turn the ILL book requests into rush acquisitions. Not only this service would meet the library’s goal of expediting delivery of information to our users when they need it but it would also benefit the library in many ways by:
- adding books to our collection
- reducing the workload of ILL staff
- being more cost effective than ILL
Books processed through ILL satisfy only a single library user. It is not uncommon in ILL that the same book be requested more than once each year or many times over the years. The library collection does not benefit from ILL activity since the books are only passing through the hands of our users and are sent back to their home libraries.

Many books purchased through firm orders by bibliographers or approval plans never circulate in our libraries but with this service they would be assured at least one circulation.

The Schulich Library’s goal was to acquire any book a user requested through ILL within a seven days time frame. The service was first set up as a few months trial but it has now become part of our regular service to our users.

The service began in June 2001. Even though the Schulich Library follows collection policies for its departments, the criteria used for this service were less restrictive and included the following ones:

Selection criteria are:

- English or French titles only
- No publication date limits
- Subjects in scope with Schulich Library collection policy
- No dissertations and audio-visual materials but any other type of monographs including conferences, technical reports, etc.
- No maximum cost
- Shipping date within one week or less
- Paperback or hardcover editions

Initially 10,000$CAD was allocated from the collections budget to acquire books in this new service. In the following years, 40,000$CAD was allocated. This is not a big amount when you consider the cost of scientific and engineering books. According to the Bowker Annual Library and Book Trade Almanac [1], here are some average prices (2001 in US$) for North American books in different scientific and engineering disciplines:

- Chemistry $133.92
- Engineering & Technology $96.59
- Geology $105.50
- Physics & Astronomy $99.52

The general process of the service is as follows:

- ILL book requests are printed and then faxed daily from the central ILL office to the Schulich Library. These requests are easily traceable since all of the Schulich ILL requests are filled on the WEB by the users and are sent electronically on a separate email box to the central ILL office;
- The ILL Librarian checks the requests against local OPAC in order to prevent the purchase of books already owned in the library. Depending on the selection criteria mentioned above, the books will either be discarded, and returned to the ILL office, or will be kept as potential purchases. This is done first thing in the morning and as soon as the ILL requests are received in Schulich.
- The ILL Librarian searches multiple web based supplier sources for rush purchases. During the first few months of the service many different sources were used but the preferred ones became Barnes&Noble.com
followed by Amazon.com. When the books are purchased or simply discarded an email is sent back to the ILL office telling them which one to process and which one to cancel.

- Why is the ILL Librarian doing the acquisitions by himself? Since he was also a bibliographer for four departments in the Schulich Library and he was aware of its collection policies it was a logical choice.
- In order to facilitate rapid payment and delivery an institutional credit card was used.
- The acquired books are sent directly from the suppliers to the ILL Librarian. A quick verification is done to make sure that the book matches the request and the proper fund code is written on the original invoice. Then the book is quickly sent to acquisition so that it can be registered in the acquisition module with the proper fund code. Once this is done, a bookmark is included in the book indicating that it is for rush cataloguing and processing and it has to be sent back to the ILL office.
- Once the ILL office gets the book back it will notify the users, usually by email, to come and pick it up. In the users’ notifications they are told to bring their ID card in order to get the books. The check out of the books on the OPAC circulation module is done by the ILL staff. The users are told to return the book to the Schulich Library when they are done. They are also told that they can also, if they need, renew the book themselves via the WEB OPAC.
- At the same time the ILL office notifies the users via email that there books are ready to be picked up, a copy of the email is also sent to ILL Librarian so that he can be aware that the whole process ended for each book.

## Results

### ILL Book Requests

Between June 2001 and May 2003, 1,128 ILL book requests were made from 388 different users of the Schulich Library. This represents an average of 2.9 ILL book requests per user. Those 388 users that made at least one ILL book request during this period of time represents only 23% of all the users from both the Faculty of Science and the Faculty of Engineering. Each user requested between 1 (52%) to 62 books (1 user). In fact 80% of the users requested 3 books or less.

The Faculty of Engineering accounted for 61% (690) off all the ILL book requests compared to 37% (407) for the faculty of Science. The department of Civil Engineering and Applied Mechanics had the most ILL book requests with 196 (17%) compared to the 17 ones (2%) from the department of Atmospheric & Oceanic Sciences. This is not a surprise since, for historical reasons, the monographs budget for the Faculty of Science has always been greater than the one for the Faculty of Engineering. This trend is slowly changing since the Schulich Library introduced a complex formula to divide the monographs fund between the departments: it takes into account different weighting values for the faculty, undergraduates, masters, PhDs and post doctorates.

The PhD students made the most ILL book requests (490/43%) of all user groups followed by masters (269/24%), staff (146/13%), faculty (126/11%) and undergraduates (92/8%). The graduate students were by far (759/67%) the heaviest users of the ILL service between 2001 and 2003.

We often hear that science and engineering users do not need older books that are published more than three to five years ago. Older books are usually requested by
users from the disciplines in humanities and social sciences. This is not quite what we see here with the breakdown of ILL book requests by publication years (Table 1):

<table>
<thead>
<tr>
<th>Publication years</th>
<th>No. Books</th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 -</td>
<td>240</td>
<td>21%</td>
</tr>
<tr>
<td>1990 - 1999</td>
<td>481</td>
<td>43%</td>
</tr>
<tr>
<td>1980 - 1989</td>
<td>190</td>
<td>17%</td>
</tr>
<tr>
<td>1970 - 1979</td>
<td>80</td>
<td>7%</td>
</tr>
<tr>
<td>1960 - 1969</td>
<td>40</td>
<td>4%</td>
</tr>
<tr>
<td>1950 - 1959</td>
<td>11</td>
<td>1%</td>
</tr>
<tr>
<td>1940 - 1949</td>
<td>3</td>
<td>0%</td>
</tr>
<tr>
<td>1930 - 1939</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>1920 - 1929</td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td>1900 - 1909</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>&lt; 1900</td>
<td>6</td>
<td>1%</td>
</tr>
<tr>
<td>Unknown</td>
<td>71</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1128</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 1. Distribution of Schulich ILL book requests by publication years (June 2001 to May 2003).

Twenty-one percent of the requests were for books published within the last four years. Even by excluding the decade of the nineties we still received another 407 (36%) ILL requests for books published fourteen years ago and more. In fact, even books published in the nineteenth century (6/1%) have been requested. The wide range of publication years requested is quite impressive for science and engineering users and probably much more than what we would have expected.

**ILL Book Requests Turned Into Acquisitions**

Out of those 1,128 ILL book requests made, 294 of them were turned into rush acquisitions for 166 individual users: a filling rate of 26%. This represents an average of 1.8 books purchased per user. Of those 166 individual users who received books through this service, 113 (68%) of them got only one book, 25 (15%) got two books and 15 (9%) got three books. On the other hand, thirteen users (8%) received between four to seventeen books each. These thirteen users received 29% (86) of the books.

The Faculty of Engineering received 62.5% (182) of all the books purchased compared to 38.5% (112) for the Faculty of Science. The department of Chemical Engineering received the highest number of books (53/18%) followed by Electrical & Computer Engineering (47/16%), Mining Metals & Materials Engineering (33/11%) and Computer Science (29/10%) from the Faculty of Science. The department of Atmospheric & Oceanic Sciences received the lowest number of books with 5 (2%).

Table 2 below shows the distribution of the books received by the user status. The PhD students received most the books with 123 (42%) followed by master students.
with 57 (19%) and staff with 50 (17%). The graduate students were by far the group of users to receive most of the books with 180 (61%).

<table>
<thead>
<tr>
<th>User Status</th>
<th>No. Books</th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>123</td>
<td>42%</td>
</tr>
<tr>
<td>Masters</td>
<td>57</td>
<td>19%</td>
</tr>
<tr>
<td>Staff</td>
<td>50</td>
<td>17%</td>
</tr>
<tr>
<td>Faculty</td>
<td>35</td>
<td>12%</td>
</tr>
<tr>
<td>Undergrads</td>
<td>24</td>
<td>8%</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>294</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 2. Distribution of Schulich ILL books purchased by user status from June 2001 to May 2003.

Those 294 books received between June 2001 and May 2003 had a total cost of $40,147, for an average of $136.55 per book including shipping and taxes (Table 3). There was a wide range of cost from $22.87 (a 1977 electrometallurgy book) to $1,057.11 (2002 chemistry title).

The total cost is made of three variables: cost of the book, cost of shipping and cost of taxes. By stripping out the costs of shipping and taxes, the average cost per book comes down to $118.71.

The cost of shipping represents 7.1% of the total cost of the books and, to some extent, is very high. The explanation of this high cost of shipping is quite simple: in order to receive the books in a timely manner we had to select the fastest method of delivery (international express courier) which also meant the most expensive one.

<table>
<thead>
<tr>
<th>Cost of books</th>
<th>Cost of Shipping</th>
<th>Cost of Taxes</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>$34,902</strong></td>
<td><strong>$2,847</strong></td>
<td><strong>$2,298</strong></td>
</tr>
<tr>
<td><strong>Average/book</strong></td>
<td><strong>$118.71</strong></td>
<td><strong>$9.68</strong></td>
<td><strong>$8.16</strong></td>
</tr>
</tbody>
</table>

Table 3. Costs of ILL books purchased from June 2001 to May 2003 in Schulich Library.

More than half of the books received (161/55%) were published in the nineties: i.e. within 5 to 14 years. Recent books, published within four years, made 35% (104) of all the books received. On the other hand, 10% (29) of the books received were published between fifteen and 44 years ago (1989 and 1960).

Four major categories of supplier were used at Schulich in order to acquire the 294 ILL books: Amazon.com, Barnes&Noble.com, Commercial Publishers (5), Society Presses (8) and University Presses (3). It comes to no surprise that Barnes&Noble.com was, and by far, the most widely used supplier with 251 books (85%) followed by Amazon.com (17/6%), Society Presses (16/5.5%), Commercial Publishers (7/2.5%) and University Presses (3/1%).

Even with selection criteria widely opened (almost any type of books, no maximum cost, etc.) many ILL book requests (834) could not be acquired during
those two years. The breakdown by the reason (major ones) as to why the books were rejected was as follows:

- Could not find 256 (31%)
- Thesis 150 (18%)
- Owned locally 96 (12%)
- Out of print 94 (11%)
- Out of scope 83 (10%)

There were also a few requests that have been cancelled by the supplier (8/1%) simply because they could not supply them in time. An interesting data from this is for the reason “Owned locally”. One would have thought that by now the users would have made some progress and efforts in searching the local OPAC before submitting an ILL request. This level of rejection is quite high. Is this a reflection of the lack of experience in searching local OPAC? Maybe! But when we see more and more users searching only by keywords (the google way) we would have expected a much lower rejection rate. Or is it simply just a matter of laziness from the part of the users? Maybe! It is possible that some users do not want to take the time searching the OPAC thinking that they are sure that the Library doesn’t have the item in its collection. It is an assumption that can be very costly at time whenever a user needs an item urgently.

**Turnaround Time**

Turnaround times have been calculated at different stages of the process in order to evaluate the performance of the suppliers and the processing unit:

1. Turnaround time to ILL:
   - The time it took to receive the book in the ILL Office from the time the book was ordered.
2. Turnaround time to process:
   - The time it took to get the book catalogued, processed and back to ILL office.
3. Total turnaround time:
   - Total turnaround time since the ordering of the book up to when it arrives in ILL after processing.

1. Turnaround Time To Ill.

The average turnaround time between the ordering of the books from the suppliers and until the receiving of them in ILL office was 5.4 days (130 hours) with a range of 1 to 89 days. The fastest time was 23.5 hours for three books ordered form Barnes&Noble.com. The longest one, again from Barnes&Noble.com, took 89 days.

2. Turnaround Time To Process.

Usually, it took between five to fifteen minutes to bring the books to the technical processing unit from the ILL office so they could be rush catalogued and processed. The average turnaround time for the processing of the books was 3.75 days (90 hours) with a range of 3.5 hours to 358 hours (14.9 days). Initially, it was planned that the books would have been processed within 24 hours. In fact only 30 books (10%) got processed within 24 hours and another 59 (20%) were done between 24 – 48 hours. It’s hard to say why the processing unit didn’t deliver most of the books in time. Many factors could have explained these delays such as the following ones:

- Workload – overload
- Books were not identified properly so they were not rush processed
- Staff is away and no replacement to do the work
- Communication problems mainly during the first few months

3. Total Turnaround Time.

Finally, the overall average turnaround time since the books were ordered and sent back processed to the ILL office was 11.8 days (284 hours) with a range of 2 (48 hours) to 91 days (2184 hours). The initial goal was to get an overall turnaround time of one week or less. The average turnaround time is close to 41% over the expected one but 100 books (34%) made it within the seven days limit.

One major problem that occurred mainly during the first six months but also sporadically throughout those two years was the fact that 75 books (25.5%) were sent directly to the Schulich Library after they were catalogued. That has created a lot of problems since nobody knew that the books were processed and were already shelved in the Library. When this happened, very often the books were signed out to the wrong users so they had to be recalled.

Circulation Data

This is another way to measure the effectiveness of the service: how often these books have circulated. Although we haven’t done a comparison of the circulation records between these books and the ones purchased through our firm orders or through our Blackwell North America approval plan, we can say that, as of June 15 2003, the 294 books have circulated at least once (50%) with an average of 2.9 circulations per book. One book had circulated 60 times and 49 of them (17%) had circulated 5 times or more. I don’t think that the same thing can be said with the books purchased outside of this service since we are acquiring many of them that are of interest to no one at all.

Conclusion

This service of turning ILL book requests into rush acquisitions has allowed the Schulich Library of Science and Engineering to deliver purchased monographs to users in a shorter amount of time than in traditional methods of acquisitions. The service has proven to be effective in terms of cost, turnaround time, processing time and circulation records. In fact many books turned to be of interest to other users than the initial requester.

The service also adds relevant titles to the collection based on users’ needs (just in time) rather than on hypothetical ones (just in case). The large number of ILL book requests received by our science and engineering users shows that monographs are still very important for them. Even though those disciplines are heavily oriented towards journal literature, we should not overlook their needs for books.

References